

Barbara

Access DB# 70280

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Howard Owens Examiner #: \_\_\_\_\_ Date: 7-3-02  
Art Unit: 1623 Phone Number 30 6-4538 Serial Number: 09/528,488  
Mail Box and Bldg/Room Location: \_\_\_\_\_ Results Format Preferred (circle): PAPER DISK E-MAIL

8B19 CM 1/8B17

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: 10/6/1998

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search claims 1, 2, 5, 6 and 7.

Point of Contact:  
Barb O'Brien  
Technical Information Specialist  
STIC CM1 6A05 308-4291

### STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>ASB</u>	NA Sequence (#) _____	STN <u>316</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic <input checked="" type="checkbox"/>	Dr. Link _____
Date Completed: <u>7-11-02</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>4:16</u>	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>73</u>	Other _____	Other (specify) <u>Humana</u>

**THIS PAGE BLANK (USPTO)**

=> fil hcapl

FILE 'HCAPLUS' ENTERED AT 10:43:08 ON 11 JUL 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 11 Jul 2002 VOL 137 ISS 2

FILE LAST UPDATED: 10 Jul 2002 (20020710/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d que 131; d que 133; d que 140

L1 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR 1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)

L2 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL

L3 ( 17)SEA FILE=REGISTRY ABB=ON L1 NOT L2

L4 ( 1)SEA FILE=REGISTRY ABB=ON 57-88-5

L5 ( 16)SEA FILE=REGISTRY ABB=ON L3 NOT L4

L6 ( 14701)SEA FILE=REGISTRY ABB=ON 5 ACETYLOXY

L7 15 SEA FILE=REGISTRY ABB=ON L5 NOT L6

L11 22206 SEA FILE=HCAPLUS ABB=ON FLAVONES+NT,OLD/CT

L12 458 SEA FILE=HCAPLUS ABB=ON L11(L)?METHOXY?

L13 41 SEA FILE=HCAPLUS ABB=ON POLYMETHOXYFLAVONE#

L14 7894 SEA FILE=HCAPLUS ABB=ON ANTICHOLESTEREMIC AGENTS+OLD/CT

L15 5890 SEA FILE=HCAPLUS ABB=ON CARDIOVASCULAR AGENTS/CT

L16 4866 SEA FILE=HCAPLUS ABB=ON ANTIARTERIOSCLEROTICS/CT

L17 284065 SEA FILE=HCAPLUS ABB=ON CARDIOVASCULAR SYSTEM+NT/CT

L18 777 SEA FILE=HCAPLUS ABB=ON ?NOBILETIN? OR ?METHYLISOSCUTELLAREIN? OR ?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?

L24 759 SEA FILE=HCAPLUS ABB=ON L7

L28 214 SEA FILE=HCAPLUS ABB=ON (L24 OR L18 OR L12 OR L13) (L) (BAC OR THU OR DMA OR PKT OR PAC)/RL

L30 81647 SEA FILE=HCAPLUS ABB=ON L17(L) (DISEASE# OR DISORDER#)

L31 11 SEA FILE=HCAPLUS ABB=ON L28 AND (L14 OR L15 OR L16 OR L30)

Roles  
BAC - Biological Activity  
THU - therapeutic use  
DMA - drug mechanism of action  
PKT - pharmacokinetics  
PAC - pharmacology

L1 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR 1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/

BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/  
BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)

L2 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL  
L3 ( 17)SEA FILE=REGISTRY ABB=ON L1 NOT L2  
L4 ( 1)SEA FILE=REGISTRY ABB=ON 57-88-5  
L5 ( 16)SEA FILE=REGISTRY ABB=ON L3 NOT L4  
L6 ( 14701)SEA FILE=REGISTRY ABB=ON 5 ACETYLOXY  
L7 15 SEA FILE=REGISTRY ABB=ON L5 NOT L6  
L8 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR  
1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI  
OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/  
BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/  
BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/  
BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)

L9 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL  
L10 4 SEA FILE=REGISTRY ABB=ON L8 AND L9  
L11 22206 SEA FILE=HCAPLUS ABB=ON FLAVONES+NT,OLD/CT  
L12 458 SEA FILE=HCAPLUS ABB=ON L11(L)?METHOXY?  
L13 41 SEA FILE=HCAPLUS ABB=ON POLYMETHOXYFLAVONE#  
L14 7894 SEA FILE=HCAPLUS ABB=ON ANTICHOLESTEREMIC AGENTS+OLD/CT  
L15 5890 SEA FILE=HCAPLUS ABB=ON CARDIOVASCULAR AGENTS/CT  
L16 4866 SEA FILE=HCAPLUS ABB=ON ANTIARTERIOSCLEROTICS/CT  
L17 284065 SEA FILE=HCAPLUS ABB=ON CARDIOVASCULAR SYSTEM+NT/CT  
L18 777 SEA FILE=HCAPLUS ABB=ON ?NOBILETIN? OR ?METHYLISOSCUTELLAREIN?  
OR ?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?  
L24 759 SEA FILE=HCAPLUS ABB=ON L7  
L25 671 SEA FILE=HCAPLUS ABB=ON L10  
L26 840 SEA FILE=HCAPLUS ABB=ON ?TOCOTRIENOL?  
L33 3 SEA FILE=HCAPLUS ABB=ON (L25 OR L26) AND (L24 OR L18 OR L12  
OR L13) AND (L14 OR L15 OR L16 OR L17)

L1 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR  
1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI  
OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/  
BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/  
BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/  
BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)

L2 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL  
L3 ( 17)SEA FILE=REGISTRY ABB=ON L1 NOT L2  
L4 ( 1)SEA FILE=REGISTRY ABB=ON 57-88-5  
L5 ( 16)SEA FILE=REGISTRY ABB=ON L3 NOT L4  
L6 ( 14701)SEA FILE=REGISTRY ABB=ON 5 ACETYLOXY  
L7 15 SEA FILE=REGISTRY ABB=ON L5 NOT L6  
L11 22206 SEA FILE=HCAPLUS ABB=ON FLAVONES+NT,OLD/CT  
L12 458 SEA FILE=HCAPLUS ABB=ON L11(L)?METHOXY?  
L13 41 SEA FILE=HCAPLUS ABB=ON POLYMETHOXYFLAVONE#  
L18 777 SEA FILE=HCAPLUS ABB=ON ?NOBILETIN? OR ?METHYLISOSCUTELLAREIN?  
OR ?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?  
L24 759 SEA FILE=HCAPLUS ABB=ON L7  
L34 1 SEA FILE=REGISTRY ABB=ON CHOLESTEROL/CN  
L35 96409 SEA FILE=HCAPLUS ABB=ON L34 OR CHOLESTEROL/OBI  
L36 2569 SEA FILE=HCAPLUS ABB=ON APOLIPOPROTEIN B/OBI  
L37 8528 SEA FILE=HCAPLUS ABB=ON LOW DENSITY(A)LIPOPROTEIN#/OBI  
L38 8 SEA FILE=HCAPLUS ABB=ON (L24 OR L18 OR L12 OR L13) AND (L35  
OR L36 OR L37)  
L40 6 SEA FILE=HCAPLUS ABB=ON L38 AND PHARMAC?/SC

=> s l31 or l33 or l40

L121 13 L31 OR L33 OR L40

=> fil wpids

FILE 'WPIDS' ENTERED AT 10:43:11 ON 11 JUL 2002  
COPYRIGHT (C) 2002 THOMSON DERWENT

FILE LAST UPDATED: 09 JUL 2002 <20020709/UP>  
MOST RECENT DERWENT UPDATE 200243 <200243/DW>  
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> Update 2002-42 does not contain any new polymer indexing <<<

>>> The BATCH option for structure searches has been  
enabled in WPINDEX/WPIDS and WPIX >>>

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY >>>

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,  
SEE <http://www.derwent.com/dwpi/updates/dwpicov/index.html> <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,  
PLEASE VISIT:  
[http://www.stn-international.de/training\\_center/patents/stn\\_guide.pdf](http://www.stn-international.de/training_center/patents/stn_guide.pdf) <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER  
GUIDES, PLEASE VISIT:  
[http://www.derwent.com/userguides/dwpi\\_guide.html](http://www.derwent.com/userguides/dwpi_guide.html) <<<

=> d que 171; d que 172; s 171 or 172

L42 83 SEA FILE=WPIDS ABB=ON ?NOBILETIN? OR ?METHYLISOSCUTELLAREIN?  
OR ?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?  
L43 3 SEA FILE=WPIDS ABB=ON POLYMETHOXYFLAVONE# OR (POLYMETHOXY OR  
POLY METHOXY OR POLY METH OXY) (W) FLAVONE#  
L45 192 SEA FILE=WPIDS ABB=ON ?TOCOTRIENOL?  
L46 14714 SEA FILE=WPIDS ABB=ON ?CHOLESTER?  
L47 116 SEA FILE=WPIDS ABB=ON (APOLIPOPROTEIN OR APO LIPO PROTEIN OR  
APOLIPO PROTEIN) (W) B  
L48 875 SEA FILE=WPIDS ABB=ON LOW DENSITY (W) (LIPOPROTEIN# OR LIPO  
PROTEIN#)  
L49 13188 SEA FILE=WPIDS ABB=ON (CARDIOVASCULAR OR CARDIO VASCULAR OR  
HEART OR CARDIAC) (5A) (DISEASE# OR DISORDER#)  
L68 12973 SEA FILE=WPIDS ABB=ON ?ARTERIOSCLERO? OR ?ATHEROSCLERO?  
L71 3 SEA FILE=WPIDS ABB=ON (L42 OR L43) AND L45 AND ((L46 OR L47  
OR L48 OR L49) OR L68)

L42 83 SEA FILE=WPIDS ABB=ON ?NOBILETIN? OR ?METHYLISOSCUTELLAREIN?  
OR ?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?  
L43 3 SEA FILE=WPIDS ABB=ON POLYMETHOXYFLAVONE# OR (POLYMETHOXY OR  
POLY METHOXY OR POLY METH OXY) (W) FLAVONE#  
L45 192 SEA FILE=WPIDS ABB=ON ?TOCOTRIENOL?  
L46 14714 SEA FILE=WPIDS ABB=ON ?CHOLESTER?  
L47 116 SEA FILE=WPIDS ABB=ON (APOLIPOPROTEIN OR APO LIPO PROTEIN OR  
APOLIPO PROTEIN) (W) B  
L48 875 SEA FILE=WPIDS ABB=ON LOW DENSITY (W) (LIPOPROTEIN# OR LIPO  
PROTEIN#)  
L49 13188 SEA FILE=WPIDS ABB=ON (CARDIOVASCULAR OR CARDIO VASCULAR OR  
HEART OR CARDIAC) (5A) (DISEASE# OR DISORDER#)  
L68 12973 SEA FILE=WPIDS ABB=ON ?ARTERIOSCLERO? OR ?ATHEROSCLERO?  
L69 11 SEA FILE=WPIDS ABB=ON (L42 OR L43) AND ((L46 OR L47 OR L48 OR  
L49) OR L68)

L71 3 SEA FILE=WPIDS ABB=ON (L42 OR L43) AND L45 AND ((L46 OR L47  
OR L48 OR L49) OR L68)  
L72 8 SEA FILE=WPIDS ABB=ON L69 NOT L71

L122 11 L71 OR L72

=> fil medl

FILE 'MEDLINE' ENTERED AT 10:43:17 ON 11 JUL 2002

FILE LAST UPDATED: 10 JUL 2002 (20020710/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the  
MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE  
SUBSTANCE IDENTIFICATION.

=> d que 190; d que 196; s 190 or 196

L1 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR  
1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI  
OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/  
BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/  
BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/  
BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)  
L2 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL  
L3 ( 17)SEA FILE=REGISTRY ABB=ON L1 NOT L2  
L4 ( 1)SEA FILE=REGISTRY ABB=ON 57-88-5  
L5 ( 16)SEA FILE=REGISTRY ABB=ON L3 NOT L4  
L6 ( 14701)SEA FILE=REGISTRY ABB=ON 5 ACETYLOXY  
L7 15 SEA FILE=REGISTRY ABB=ON L5 NOT L6  
L8 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR  
1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI  
OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/  
BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/  
BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/  
BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)  
L9 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL  
L10 4 SEA FILE=REGISTRY ABB=ON L8 AND L9  
L73 2972 SEA FILE=MEDLINE ABB=ON CARDIOVASCULAR AGENTS/CT  
L74 58947 SEA FILE=MEDLINE ABB=ON ARTERIOSCLEROSIS+NT/CT  
L75 6009 SEA FILE=MEDLINE ABB=ON ANTICHOLESTEREMIC AGENTS/CT  
L76 630810 SEA FILE=MEDLINE ABB=ON A7./CT = *cardiovascular system*  
L77 5731 SEA FILE=MEDLINE ABB=ON APOLIPOPROTEINS B/CT  
L78 15793 SEA FILE=MEDLINE ABB=ON HYPERCHOLESTEROLEMIA+NT/CT  
L79 81692 SEA FILE=MEDLINE ABB=ON CHOLESTEROL+NT/CT  
L80 22993 SEA FILE=MEDLINE ABB=ON LIPOPROTEINS, LDL+NT/CT  
L81 7809 SEA FILE=MEDLINE ABB=ON LIPOPROTEINS, VLDL+NT/CT  
L83 198 SEA FILE=MEDLINE ABB=ON ?TOCOTRIENOL?  
L84 12234 SEA FILE=MEDLINE ABB=ON FLAVONES+NT/CT  
L85 114 SEA FILE=MEDLINE ABB=ON ?NOBILETIN? OR ?METHYLISOSCUTELLAREIN?  
OR ?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?  
L86 5 SEA FILE=MEDLINE ABB=ON POLYMETHOXYFLAVONE# OR POLYALKYLOXYFLA  
VONE#  
L88 48 SEA FILE=MEDLINE ABB=ON L7  
L89 41 SEA FILE=MEDLINE ABB=ON L10  
L90 1 SEA FILE=MEDLINE ABB=ON (L73 OR L74 OR L75 OR L76 OR L77 OR  
L78 OR L79 OR L80 OR L81) AND (L83 OR L89) AND ((L84 OR L85 OR

L86) OR L88)

```
L1 (      21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR
      1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI
      OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/
      BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/
      BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/
      BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)
L2 (      2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL
L3 (      17)SEA FILE=REGISTRY ABB=ON L1 NOT L2
L4 (      1)SEA FILE=REGISTRY ABB=ON 57-88-5
L5 (      16)SEA FILE=REGISTRY ABB=ON L3 NOT L4
L6 (      14701)SEA FILE=REGISTRY ABB=ON 5 ACETYLOXY
L7 (      15 SEA FILE=REGISTRY ABB=ON L5 NOT L6
L73      2972 SEA FILE=MEDLINE ABB=ON CARDIOVASCULAR AGENTS/CT
L74      58947 SEA FILE=MEDLINE ABB=ON ARTERIOSCLEROSIS+NT/CT
L75      6009 SEA FILE=MEDLINE ABB=ON ANTICHOLESTEREMIC AGENTS/CT
L76      630810 SEA FILE=MEDLINE ABB=ON A7./CT
L77      5731 SEA FILE=MEDLINE ABB=ON APOLIPOPROTEINS B/CT
L78      15793 SEA FILE=MEDLINE ABB=ON HYPERCHOLESTEROLEMIA+NT/CT
L79      81692 SEA FILE=MEDLINE ABB=ON CHOLESTEROL+NT/CT
L80      22993 SEA FILE=MEDLINE ABB=ON LIPOPROTEINS, LDL+NT/CT
L81      7809 SEA FILE=MEDLINE ABB=ON LIPOPROTEINS, VLDL+NT/CT
L84      12234 SEA FILE=MEDLINE ABB=ON FLAVONES+NT/CT
L85      114 SEA FILE=MEDLINE ABB=ON ?NOBILETIN? OR ?METHYLISOSCUTELLAREIN?
      OR ?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?
L86      5 SEA FILE=MEDLINE ABB=ON POLYMETHOXYFLAVONE# OR POLYALKYLOXYFLA
      VONE#
L88      48 SEA FILE=MEDLINE ABB=ON L7
L93      244 SEA FILE=MEDLINE ABB=ON ?METHOXYFLAVONE?
L96      5 SEA FILE=MEDLINE ABB=ON (L73 OR L74 OR L75 OR L76 OR L77 OR
      L78 OR L79 OR L80 OR L81) AND ((L85 OR L86) OR L88 OR L93) AND
      L84
```

L123 6 L90 OR L96

=> fil embase

FILE 'EMBASE' ENTERED AT 10:43:22 ON 11 JUL 2002  
COPYRIGHT (C) 2002 Elsevier Science B.V. All rights reserved.

FILE COVERS 1974 TO 8 Jul 2002 (20020708/ED)

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> d que 1112; d que 1119

```
L1 (      21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR
      1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI
      OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/
      BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/
      BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/
      BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)
L2 (      2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL
L3 (      17)SEA FILE=REGISTRY ABB=ON L1 NOT L2
L4 (      1)SEA FILE=REGISTRY ABB=ON 57-88-5
```

L5 ( 16)SEA FILE=REGISTRY ABB=ON L3 NOT L4  
L6 ( 14701)SEA FILE=REGISTRY ABB=ON 5 ACETYLOXY  
L7 15 SEA FILE=REGISTRY ABB=ON L5 NOT L6  
L8 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR  
1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI  
OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/  
BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/  
BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/  
BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)  
L9 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL  
L10 4 SEA FILE=REGISTRY ABB=ON L8 AND L9  
L105 247 SEA FILE=EMBASE ABB=ON ?TOCOTRIENOL?  
L106 199 SEA FILE=EMBASE ABB=ON L10  
L107 123 SEA FILE=EMBASE ABB=ON L7  
L109 242 SEA FILE=EMBASE ABB=ON ?NOBILETIN? OR ?CUTELLAREIN? OR  
?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?  
L110 413 SEA FILE=EMBASE ABB=ON ?METHOXYFLAVONE?  
L112 0 SEA FILE=EMBASE ABB=ON (L105 OR L106) AND (L107 OR L109 OR  
L110)  
  
L1 ( 21)SEA FILE=REGISTRY ABB=ON (1178-24-1/BI OR 1244-78-6/BI OR  
1245-15-4/BI OR 1247-97-8/BI OR 14101-61-2/BI OR 1486-56-2/BI  
OR 14965-12-9/BI OR 1721-51-3/BI OR 2174-59-6/BI OR 21763-80-4/  
BI OR 2306-27-6/BI OR 25612-59-3/BI OR 478-01-3/BI OR 481-53-8/  
BI OR 57-88-5/BI OR 57528-78-6/BI OR 6601-66-7/BI OR 6829-55-6/  
BI OR 7678-40-2/BI OR 7741-47-1/BI OR 95943-97-8/BI)  
L2 ( 2347)SEA FILE=REGISTRY ABB=ON BENZOPYRAN-6-OL  
L3 ( 17)SEA FILE=REGISTRY ABB=ON L1 NOT L2  
L4 ( 1)SEA FILE=REGISTRY ABB=ON 57-88-5  
L5 ( 16)SEA FILE=REGISTRY ABB=ON L3 NOT L4  
L6 ( 14701)SEA FILE=REGISTRY ABB=ON 5 ACETYLOXY  
L7 15 SEA FILE=REGISTRY ABB=ON L5 NOT L6  
L97 9453 SEA FILE=EMBASE ABB=ON CARDIOVASCULAR AGENT/CT OR CARDIAC  
AGENT/CT OR ANTILIPEMIC AGENT/CT OR HYPOCHOLESTEROLEMIC  
AGENT/CT  
L98 51973 SEA FILE=EMBASE ABB=ON ARTERIOSCLEROSIS+NT/CT  
L100 5789 SEA FILE=EMBASE ABB=ON APOLIPOPROTEIN B/CT  
L101 16686 SEA FILE=EMBASE ABB=ON HYPERCHOLESTEROLEMIA+NT/CT  
L102 61370 SEA FILE=EMBASE ABB=ON CHOLESTEROL+NT/CT  
L103 16025 SEA FILE=EMBASE ABB=ON LOW DENSITY LIPOPROTEIN/CT  
L104 6085 SEA FILE=EMBASE ABB=ON VERY LOW DENSITY LIPOPROTEIN/CT  
L107 123 SEA FILE=EMBASE ABB=ON L7  
L108 917224 SEA FILE=EMBASE ABB=ON CARDIOVASCULAR DISEASE+NT/CT  
L109 242 SEA FILE=EMBASE ABB=ON ?NOBILETIN? OR ?CUTELLAREIN? OR  
?SINENSETIN? OR ?QUERCITIN? OR ?TANGERETIN?  
L110 413 SEA FILE=EMBASE ABB=ON ?METHOXYFLAVONE?  
L117 26 SEA FILE=EMBASE ABB=ON (L107 OR L109 OR L110) AND (L108 OR  
L97 OR L98 OR (L100 OR L101 OR L102 OR L103 OR L104))  
L119 13 SEA FILE=EMBASE ABB=ON L117 AND (PD OR DT OR PC)/CT

=> dup rem 1123,1121,1119,1122

FILE 'MEDLINE' ENTERED AT 10:43:47 ON 11 JUL 2002

FILE 'HCAPLUS' ENTERED AT 10:43:47 ON 11 JUL 2002

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 10:43:47 ON 11 JUL 2002

COPYRIGHT (C) 2002 Elsevier Science B.V. All rights reserved.

*Subheadings - PD - pharmacology  
DT - drug therapy  
PC - prevention*



FILE 'WPIDS' ENTERED AT 10:43:47 ON 11 JUL 2002

COPYRIGHT (C) 2002 THOMSON DERWENT

PROCESSING COMPLETED FOR L123

PROCESSING COMPLETED FOR L121

PROCESSING COMPLETED FOR L119

PROCESSING COMPLETED FOR L122

L124 39 DUP REM L123 L121 L119 L122 (4 DUPLICATES REMOVED)

ANSWERS '1-6' FROM FILE MEDLINE

ANSWERS '7-19' FROM FILE HCAPLUS

ANSWERS '20-32' FROM FILE EMBASE

ANSWERS '33-39' FROM FILE WPIDS

=> d iall 1-6; d ibib abs hitstr 7-19; d iall 20-32; d ibib ab 33-39; fil hom

L124 ANSWER 1 OF 39 MEDLINE

ACCESSION NUMBER: 2001108968 MEDLINE

DOCUMENT NUMBER: 21065691 PubMed ID: 11137857

TITLE: Inhibitory effect of pentalenolactone on vascular smooth muscle cell proliferation.

AUTHOR: Ikeda M; Fukuda A; Takagi M; Morita M; Shimada Y

CORPORATE SOURCE: Department of Veterinary Pharmacology, Faculty of Agriculture, Miyazaki University, 1-1 Gakuenkibanadai-nishi, 889-2192, Miyazaki, Japan.

SOURCE: EUROPEAN JOURNAL OF PHARMACOLOGY, (2001 Jan 5) 411 (1-2) 45-53.

Journal code: 1254354. ISSN: 0014-2999.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200102

ENTRY DATE: Entered STN: 20010322

Last Updated on STN: 20010322

Entered Medline: 20010208

#### ABSTRACT:

The effect of pentalenolactone, an inhibitor of glyceraldehyde-3-phosphate dehydrogenase, on rat vascular smooth muscle cell proliferation was studied. Addition of pentalenolactone together with serum to quiescent cells dose-dependently inhibited cell proliferation and DNA synthesis. This inhibition was not associated with cell death. When quiescent cells were stimulated with serum and then treated with pentalenolactone, the inhibitory effect on the DNA synthesis declined gradually. A similar result was obtained when PD 98059 (2'-amino-3'-methoxyflavone), an inhibitor of extracellular signal-regulated kinase1/2 (ERK1/2) kinase (MEK1/2), was added to the cells after serum stimulation. Pentalenolactone inhibited serum or protein kinase C activator (phorbol 12,13-dibutyrate)-induced phosphorylation of ERK1/2 and MEK1/2. In contrast, pentalenolactone had little effect on platelet-derived growth factor receptor autophosphorylation. Taken together, these results indicate that pentalenolactone inhibits vascular smooth muscle cell proliferation, and that this inhibition appears to be mediated by inhibition of the ERK1/2 cascade.

CONTROLLED TERM: Check Tags: Animal

3T3 Cells

\*Antibiotics: PD, pharmacology

Ca(2+)-Calmodulin Dependent Protein Kinase: AI, antagonists & inhibitors

\*Cell Division: DE, drug effects

Cell Movement: DE, drug effects

Cells, Cultured

Cyclin-Dependent Kinases: AI, antagonists & inhibitors

DNA: BI, biosynthesis

DNA: DE, drug effects  
Dose-Response Relationship, Drug  
Enzyme Inhibitors: PD, pharmacology  
Flavones: PD, pharmacology  
Glyceraldehyde-3-Phosphate Dehydrogenases: AI, antagonists  
& inhibitors  
Glycolysis: DE, drug effects  
Mice  
Mitogen-Activated Protein Kinase Kinases: DE, drug effects  
Mitogen-Activated Protein Kinase Kinases: ME, metabolism  
Mitogen-Activated Protein Kinases: DE, drug effects  
Mitogen-Activated Protein Kinases: ME, metabolism  
Muscle, Smooth, Vascular: CY, cytology  
\*Muscle, Smooth, Vascular: DE, drug effects  
Muscle, Smooth, Vascular: ME, metabolism  
Phosphorylation: DE, drug effects  
Protein-Serine-Threonine Kinases: DE, drug effects  
Protein-Serine-Threonine Kinases: ME, metabolism  
Protein-Tyrosine Kinase: DE, drug effects  
Protein-Tyrosine Kinase: ME, metabolism  
Purines: PD, pharmacology  
Rats  
Rats, Sprague-Dawley  
Receptors, Platelet-Derived Growth Factor: DE, drug  
effects  
Receptors, Platelet-Derived Growth Factor: ME, metabolism  
\*Sesquiterpenes: PD, pharmacology  
Time Factors  
Tyrosine: DE, drug effects  
Tyrosine: ME, metabolism  
p42 MAP Kinase: DE, drug effects  
p42 MAP Kinase: ME, metabolism  
31501-48-1 (arenaemycin E); 55520-40-6 (Tyrosine);  
9007-49-2 (DNA)  
0 (Antibiotics); 0 (Cyclin-Dependent Kinases); 0 (Enzyme  
Inhibitors); 0 (Flavones); 0 (PD 98059); 0 (Purines); 0  
(Sesquiterpenes); 0 (olomoucine); EC 1.2.1.-  
(Glyceraldehyde-3-Phosphate Dehydrogenases); EC 2.7.1.-  
(MEK1 protein); EC 2.7.1.- (MEK2 protein); EC 2.7.1.-  
(Mitogen-Activated Protein Kinases); EC 2.7.1.-  
(Protein-Serine-Threonine Kinases); EC 2.7.1.112  
(Protein-Tyrosine Kinase); EC 2.7.10.- (Ca(2+)-Calmodulin  
Dependent Protein Kinase); EC 2.7.10.- (Mitogen-Activated  
Protein Kinases); EC 2.7.10.- (extracellular  
signal-regulated kinase 1); EC 2.7.10.- (p42 MAP Kinase);  
EC 2.7.11.- (Receptors, Platelet-Derived Growth Factor)

L124 ANSWER 2 OF 39 MEDLINE  
ACCESSION NUMBER: 1999243733 MEDLINE  
DOCUMENT NUMBER: 99243733 PubMed ID: 10227146  
TITLE: Effect of dietary antioxidants on serum lipid contents and  
immunoglobulin productivity of lymphocytes in  
Sprague-Dawley rats.  
AUTHOR: Kaku S; Yunoki S; Mori M; Ohkura K; Nonaka M; Sugano M;  
Yamada K  
CORPORATE SOURCE: Department of Food Science and Technology, Faculty of  
Agriculture, Kyushu University, Fukuoka, Japan.  
SOURCE: BIOSCIENCE, BIOTECHNOLOGY, AND BIOCHEMISTRY, (1999 Mar) 63  
(3) 575-6.  
Journal code: 9205717. ISSN: 0916-8451.  
PUB. COUNTRY: Japan  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English

FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199906  
ENTRY DATE: Entered STN: 19990628  
Last Updated on STN: 19990628  
Entered Medline: 19990615

## ABSTRACT:

Sprague-Dawley rats were fed alpha-tocopherol, **tocotrienol**, or quercetin to examine their dietary effects on serum lipid contents and immunoglobulin productivity. In **tocotrienol** or quercetin groups, serum triglyceride was lower than in the none group. Moreover, in the alpha-tocopherol group, serum IgA level and IgA productivity of MLN lymphocytes were high, while in the **tocotrienol** group, IgM productivity of spleen lymphocytes and IgA, IgG, and IgM productivity of MLN lymphocytes were high. Thus, we suggested each antioxidant had different effects in rats.

CONTROLLED TERM: Check Tags: Animal; Male  
\*Antioxidants: PD, pharmacology  
    **Cholesterol: BL, blood**  
\*Diet  
    Immunoglobulin A: BI, biosynthesis  
    Immunoglobulin G: BI, biosynthesis  
    Immunoglobulin M: BI, biosynthesis  
\*Immunoglobulins: BI, biosynthesis  
\*Lipids: BL, blood  
\*Lymphocytes: DE, drug effects  
    Lymphocytes: ME, metabolism  
    **Quercetin: PD, pharmacology**  
    Rats  
    Rats, Sprague-Dawley  
    Spleen: CY, cytology  
    Spleen: DE, drug effects  
    Spleen: ME, metabolism  
    Triglycerides: BL, blood  
    Vitamin E: AA, analogs & derivatives  
    Vitamin E: PD, pharmacology

CAS REGISTRY NO.: 117-39-5 (Quercetin); 1406-18-4 (Vitamin E); 57-88-5 (Cholesterol)

CHEMICAL NAME: 0 (Antioxidants); 0 (Immunoglobulin A); 0 (Immunoglobulin G); 0 (Immunoglobulin M); 0 (Immunoglobulins); 0 (Lipids); 0 (Triglycerides)

L124 ANSWER 3 OF 39

MEDLINE  
ACCESSION NUMBER: 2000068727 MEDLINE  
DOCUMENT NUMBER: 20068727 PubMed ID: 10600174  
TITLE: Inhibitory effect of quercetin metabolites and their related derivatives on copper ion-induced lipid peroxidation in human low-density lipoprotein.  
AUTHOR: Yamamoto N; Moon J H; Tsushida T; Nagao A; Terao J  
CORPORATE SOURCE: Takeda Food Products. Ltd, Itami, Hyogo, 664-0011, Japan.  
SOURCE: ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1999 Dec 15) 372 (2) 347-54.  
Journal code: 0372430. ISSN: 0003-9861.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200001  
ENTRY DATE: Entered STN: 20000204  
Last Updated on STN: 20000204  
Entered Medline: 20000124

## ABSTRACT:

To determine the antioxidant activity of dietary quercetin (3,3',4',5,7-pentahydroxyflavone) in the blood circulation, we measured the inhibitory

effect of quercetin metabolites and their related derivatives on copper ion-induced lipid peroxidation of human low-density lipoprotein (LDL). Conjugated quercetin metabolites were prepared from the plasma of rat 1 h after oral administration of quercetin aglycone (40 micromol/rat). The rate of cholesteryl ester hydroperoxide (CE-OOH) accumulation and the rate of alpha-tocopherol consumption in mixtures of LDL solution (0.4 mg/ml) with equal volumes of this preparation were slower than the rates in mixtures of LDL with preparations from control rats. The concentrations of CE-OOH after 2 h oxidation in the mixtures of LDL with preparations of conjugated quercetin metabolites were significantly lower than those in the control preparation. It is therefore confirmed that conjugated quercetin metabolites have an inhibitory effect on copper ion-induced lipid peroxidation in human LDL. Quercetin 7-O-beta-glucopyranoside (Q7G) and rhamnetin (3,3',4', 5-tetrahydroxy-7-\*\*\*methoxyflavone\*\*\*) exerted strong inhibition and their effect continued even after complete consumption, similarly to quercetin aglycone. The effect of quercetin 3-O-beta-glucopyranoside (Q3G) did not continue after its complete consumption, indicating that the antioxidant mechanism of quercetin conjugates lacking a free hydroxyl group at the 3-position is different from that of the other quercetin conjugates. The result that 4'-O-beta-glucopyranoside (Q4'G) and isorhamnetin (3,4',5, 7-tetrahydroxy-3'-methoxyflavone) showed little inhibition implies that introduction of a conjugate group to the position of the dihydroxyl group in the B ring markedly decreases the inhibitory effect. The results of azo radical-induced lipid peroxidation of LDL and the measurement of free radical scavenging capacity using stable free radical, 1,1,-diphenyl-2-picrylhydrazyl, demonstrated that the o-dihydroxyl structure in the B ring is required to exert maximum free radical scavenging activity. It is therefore likely that conjugation occurs at least partly in positions other than the B ring during the process of metabolic conversion so that the inhibitory effect of dietary quercetin is retained in blood plasma after absorption.

Copyright 1999 Academic Press.

CONTROLLED TERM: Check Tags: Animal; Human; Male; Support, Non-U.S. Gov't  
Amidines: AI, antagonists & inhibitors  
Amidines: PD, pharmacology  
Antioxidants: CH, chemistry  
Antioxidants: ME, metabolism  
Antioxidants: PD, pharmacology  
Bepridil: AA, analogs & derivatives  
Bepridil: ME, metabolism  
Cholesterol Esters: ME, metabolism  
Copper Sulfate: AI, antagonists & inhibitors  
\*Copper Sulfate: PD, pharmacology  
Cysteine: ME, metabolism  
Free Radical Scavengers: CH, chemistry  
Free Radical Scavengers: ME, metabolism  
Free Radical Scavengers: PD, pharmacology  
Free Radicals: ME, metabolism  
Kinetics  
\*Lipid Peroxidation: DE, drug effects  
\*Lipoproteins, LDL: ME, metabolism  
Models, Chemical  
Oxidants: AI, antagonists & inhibitors  
Oxidants: PD, pharmacology  
Oxidation-Reduction: DE, drug effects  
Quercetin: AA, analogs & derivatives  
Quercetin: CH, chemistry  
\*Quercetin: ME, metabolism  
\*Quercetin: PD, pharmacology  
Rats  
Rats, Wistar  
Vitamin E: ME, metabolism  
CAS REGISTRY NO.: 117-39-5 (Quercetin); 13217-66-8 (2,2'-azobis(2-

amidinopropane)); 1406-18-4 (Vitamin E); 1898-66-4 (2,2-diphenyl-1-picrylhydrazyl); 2058-59-5 (cholesteryl ester hydroperoxide); 52-90-4 (Cysteine); 64706-54-3 (Bepridil); 7758-98-7 (Copper Sulfate)  
CHEMICAL NAME: 0 (Amidines); 0 (Antioxidants); 0 (Cholesterol Esters); 0 (Free Radical Scavengers); 0 (Free Radicals); 0 (Lipoproteins, LDL); 0 (Oxidants)

L124 ANSWER 4 OF 39 MEDLINE  
ACCESSION NUMBER: 95218768 MEDLINE  
DOCUMENT NUMBER: 95218768 PubMed ID: 7703977  
TITLE: Cardiostonic flavonoids from Citrus plants (Rutaceae).  
AUTHOR: Itoigawa M; Takeya K; Furukawa H  
CORPORATE SOURCE: Tokaigakuen Women's College, Nagoya, Japan.  
SOURCE: BIOLOGICAL AND PHARMACEUTICAL BULLETIN, (1994 Nov) 17 (11) 1519-21.  
Journal code: 9311984. ISSN: 0918-6158.  
PUB. COUNTRY: Japan  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199505  
ENTRY DATE: Entered STN: 19950518  
Last Updated on STN: 19980206  
Entered Medline: 19950508

## ABSTRACT:

Two flavonoids, 3,5,6,7,8,3',4'-heptamethoxyflavone (HEPTA) and natsudaiddain isolated from Citrus plants (Rutaceae), produced a positive inotropic effect (PIE) on guinea-pig papillary muscle. Natsudaiddain (pD<sub>2</sub> 4.98 +/- 0.07) was more potent than HEPTA (pD<sub>2</sub> 4.33 +/- 0.08), but the maximum PIE of HEPTA was greater than that of natsudaiddain. The PIE of HEPTA was completely inhibited by reserpinization of the guinea pig, and partially inhibited by metoprolol and carbachol. The carbachol inhibition was omitted by atropine. The mechanism of PIE of HEPTA is accounted for catecholamine release from cardiac tissue.

CONTROLLED TERM: Check Tags: Animal; Female; Male  
Cardiostonic Agents: AD, administration & dosage  
Cardiostonic Agents: IP, isolation & purification  
\*Cardiostonic Agents: PD, pharmacology  
\*Citrus: CH, chemistry  
Dose-Response Relationship, Drug  
Flavones: AD, administration & dosage  
Flavones: IP, isolation & purification  
\*Flavones: PD, pharmacology  
Guinea Pigs  
Methylation  
\*Myocardial Contraction: DE, drug effects  
Papillary Muscles: DE, drug effects  
Plant Extracts: AD, administration & dosage  
Plant Extracts: IP, isolation & purification  
Plant Extracts: PD, pharmacology  
Plant Leaves: CH, chemistry  
Rats  
Structure-Activity Relationship  
Time Factors

CAS REGISTRY NO.: 1178-24-1 (3,3',4',5,6,7,8-heptamethoxyflavone);  
35154-55-3 (natsudaiddain)  
CHEMICAL NAME: 0 (Cardiostonic Agents); 0 (Flavones); 0 (Plant Extracts)

L124 ANSWER 5 OF 39 MEDLINE  
ACCESSION NUMBER: 95131371 MEDLINE  
DOCUMENT NUMBER: 95131371 PubMed ID: 7830234

TITLE: Anti-invasive activity of 3,7-dimethoxyflavone in vitro.  
AUTHOR: Parmar V S; Jain R; Sharma S K; Vardhan A; Jha A; Taneja P; Singh S; Vyncke B M; Bracke M E; Mareel M M  
CORPORATE SOURCE: Department of Chemistry, University of Delhi, India.  
SOURCE: JOURNAL OF PHARMACEUTICAL SCIENCES, (1994 Sep) 83 (9) 1217-21.  
Journal code: 2985195R. ISSN: 0022-3549.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199502  
ENTRY DATE: Entered STN: 19950307  
Last Updated on STN: 19970203  
Entered Medline: 19950217

## ABSTRACT:

Invasion of MCF-7/6 human mammary carcinoma cells into embryonic chick heart fragments was studied in organ culture during 8 days. The effect of 31 polyphenolic compounds, belonging to the flavonoids, chalcones, or coumarins, was tested in this assay for invasion. The anti-invasive activity of 3,7-\*\*\*dimethoxyflavone\*\*\* was found at concentrations ranging from 1 to 100 microM. At these anti-invasive concentrations, no cytotoxic effects could be detected: the anti-invasive effect was reversible upon omission of the molecule from the medium, and treatment of MCF-7/6 cells or heart fragments did not affect subsequent outgrowth from explants on tissue culture plastic. The molecule did not inhibit growth of MCF-7/6 cell aggregates nor of heart fragments kept in suspension culture. The action mechanism of 3,7-\*\*\*dimethoxyflavone\*\*\* is the subject of our ongoing research.

CONTROLLED TERM: Check Tags: Animal; Human; Support, Non-U.S. Gov't  
\*Antineoplastic Agents: PD, pharmacology  
Breast Neoplasms  
Chick Embryo  
\*Flavones: PD, pharmacology  
Heart: EM, embryology  
\*Neoplasm Invasiveness: PA, pathology  
Organ Culture  
Structure-Activity Relationship  
Tumor Cells, Cultured  
CHEMICAL NAME: 0 (3,7-dimethoxyflavone); 0 (Antineoplastic Agents); 0 (Flavones)

L124 ANSWER 6 OF 39 MEDLINE  
ACCESSION NUMBER: 89168929 MEDLINE  
DOCUMENT NUMBER: 89168929 PubMed ID: 2924447  
TITLE: The flavonoid **tangeretin** inhibits invasion of MO4 mouse cells into embryonic chick heart in vitro.  
AUTHOR: Bracke M E; Vyncke B M; Van Larebeke N A; Bruyneel E A; De Bruyne G K; De Pestel G H; De Coster W J; Espeel M F; Mareel M M  
CORPORATE SOURCE: Department of Radiotherapy and Nuclear Medicine, University Hospital, Gent, Belgium.  
SOURCE: CLINICAL AND EXPERIMENTAL METASTASIS, (1989 May-Jun) 7 (3) 283-300.  
Journal code: 8409970. ISSN: 0262-0898.  
PUB. COUNTRY: ENGLAND: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 198905  
ENTRY DATE: Entered STN: 19900306  
Last Updated on STN: 19900306

Entered Medline: 19890505

## ABSTRACT:

**Tangeretin**, a flavonoid from citrus plants, was found to inhibit the invasion of MO4 cells (Kirsten murine sarcoma virus transformed fetal mouse cells) into embryonic chick heart fragments in vitro. The flavonoid appeared to be chemically stable in tissue culture medium, and the anti-invasive effect was reversible on omission of the molecule from the medium. Unlike (+)-catechin, another anti-invasive flavonoid, **tangeretin** bound poorly to extracellular matrix. It did not alter fucosylated surface glycopeptides of MO4 cells. **Tangeretin** seemed not to act as a microtubule inhibitor, as immunocytochemistry revealed no disturbance of the cytoplasmic microtubule complex. However, at anti-invasive concentrations of **tangeretin**, cell proliferation and thymidine incorporation appeared to be inhibited. When cultured on an artificial substrate, treated MO4 cells were less elongated, covered a larger surface area and exhibited a slower directional migration than untreated cells. From the decrease in ATP content in MO4 cells after \*\*\*tangeretin\*\*\* treatment, we deduce that this flavonoid inhibits a number of intracellular processes, which leads to an inhibition of cell motility and hence of invasion.

CONTROLLED TERM: Check Tags: Animal; Support, Non-U.S. Gov't  
Adenosine Triphosphate: ME, metabolism  
Cell Aggregation  
Cell Line  
Cell Movement: DE, drug effects  
Chick Embryo  
DNA Replication  
\*Flavones: PD, pharmacology  
Fucose: AN, analysis  
Glycopeptides: IP, isolation & purification  
\*Heart: DE, drug effects  
Mice  
Mice, Inbred C3H  
Microtubules: DE, drug effects  
Microtubules: UL, ultrastructure  
\*Myocardium: PA, pathology  
\*Neoplasm Invasiveness: UL, ultrastructure  
Organ Culture  
\*Sarcoma, Experimental: PA, pathology  
Sarcoma, Experimental: PP, physiopathology  
Sarcoma, Experimental: UL, ultrastructure  
CAS REGISTRY NO.: 3713-31-3 (Fucose); 481-53-8 (**tangeretin**);  
56-65-5 (Adenosine Triphosphate)  
CHEMICAL NAME: 0 (Flavones); 0 (Glycopeptides)

L124 ANSWER 7 OF 39 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 1  
ACCESSION NUMBER: 2001:713074 HCAPLUS  
DOCUMENT NUMBER: 135:251964  
TITLE: Compositions and methods using  
**polymethoxyflavones** for treating, reducing,  
and preventing cardiovascular diseases and disorders  
INVENTOR(S): Horowitz, Robert M.; Guthrie, Najla; Kurowska,  
Elzbieta Maria; Manthey, John A.  
PATENT ASSIGNEE(S): KGK Synergie, Can.; United States Department of  
Agriculture  
SOURCE: PCT Int. Appl., 20 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001070029	A1	20010927	WO 2001-US8395	20010316
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 2000-528488 A 20000317

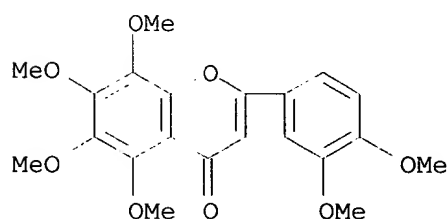
AB Compsn. and methods for the treatment, redn., and/or prevention of cardiovascular diseases and disorders are described. Individuals at high risk for developing or having cardiovascular disease or disorder may be treated with an ED of a **polymethoxyflavone** including limocitrin derivs., quercetin derivs., naturally occurring **polymethoxyflavones**, **tocotrienols**, and mixts. of these compds.

IT 478-01-3 481-53-8 1178-24-1 1244-78-6  
1245-15-4 1247-97-8 1486-56-2  
1721-51-3, .alpha.-Tocotrienol 2174-59-6  
2306-27-6 6601-66-7 6829-55-6,  
Tocotrienol 7678-40-2 7741-47-1  
14101-61-2, .gamma.-Tocotrienol 14965-12-9  
21763-80-4 25612-59-3, .delta.-Tocotrienol  
95943-97-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**polymethoxyflavones** for cardiovascular disease treatment)

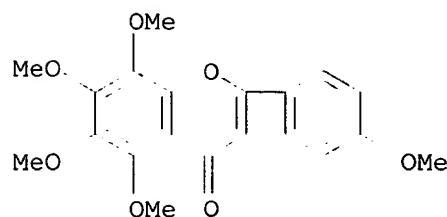
RN 478-01-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



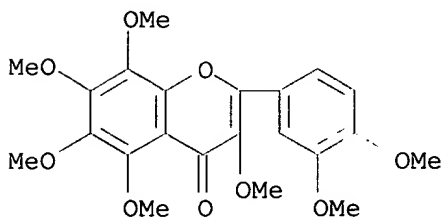
RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)

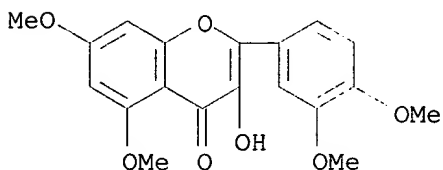




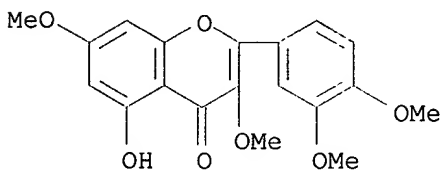
RN 1178-24-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3,5,6,7,8-pentamethoxy-  
(9CI) (CA INDEX NAME)

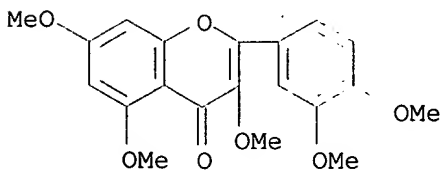
RN 1244-78-6 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3-hydroxy-5,7-dimethoxy-  
(9CI) (CA INDEX NAME)

RN 1245-15-4 HCAPLUS

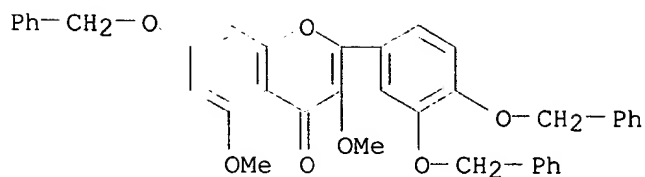
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-3,7-dimethoxy-  
(9CI) (CA INDEX NAME)

RN 1247-97-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3,5,7-trimethoxy- (9CI)  
(CA INDEX NAME)

RN 1486-56-2 HCAPLUS

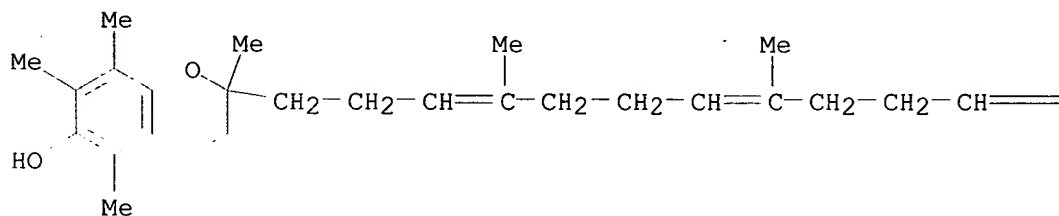
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(phenylmethoxy)phenyl]-3,5-dimethoxy-7-(  
phenylmethoxy)- (9CI) (CA INDEX NAME)



RN 1721-51-3 HCAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

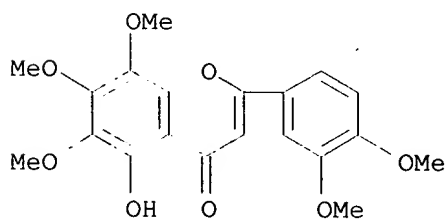


PAGE 1-B

= CMe<sub>2</sub>

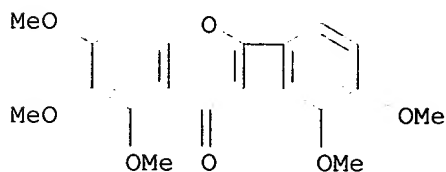
RN 2174-59-6 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-6,7,8-trimethoxy- (9CI) (CA INDEX NAME)



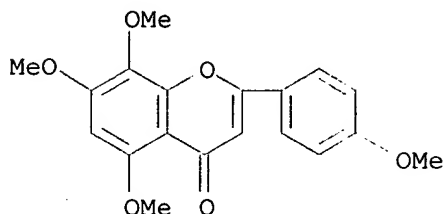
RN 2306-27-6 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7-trimethoxy- (9CI) (CA INDEX NAME)



RN 6601-66-7 HCAPLUS

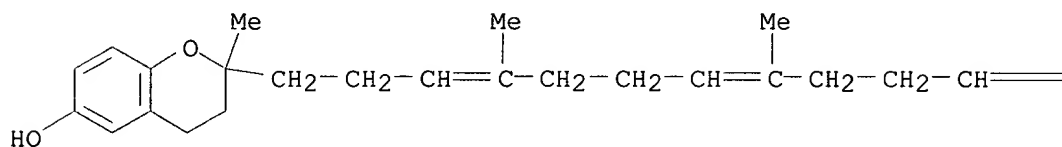
CN 4H-1-Benzopyran-4-one, 5,7,8-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 6829-55-6 HCAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2-methyl-2-(4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

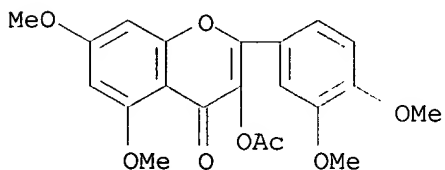


PAGE 1-B

= CMe<sub>2</sub>

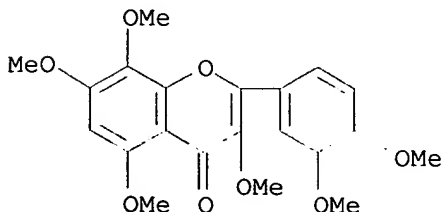
RN 7678-40-2 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-(acetyloxy)-2-(3,4-dimethoxyphenyl)-5,7-dimethoxy- (9CI) (CA INDEX NAME)



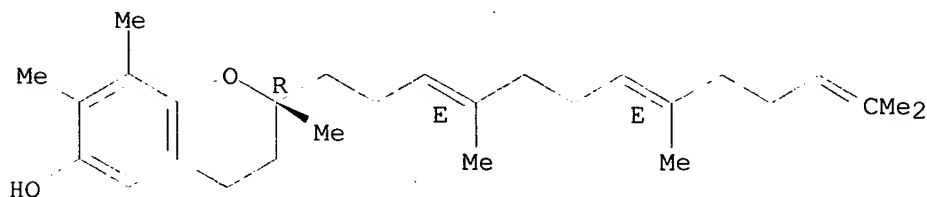
RN 7741-47-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3,5,7,8-tetramethoxy- (9CI) (CA INDEX NAME)

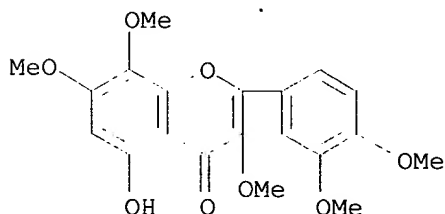


RN 14101-61-2 HCAPLUS  
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,7,8-trimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrienyl]-, (2R)- (9CI) (CA INDEX NAME)

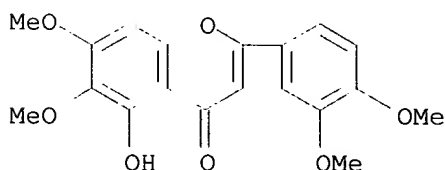
Absolute stereochemistry.  
Double bond geometry as shown.



RN 14965-12-9 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-3,7,8-trimethoxy- (9CI) (CA INDEX NAME)

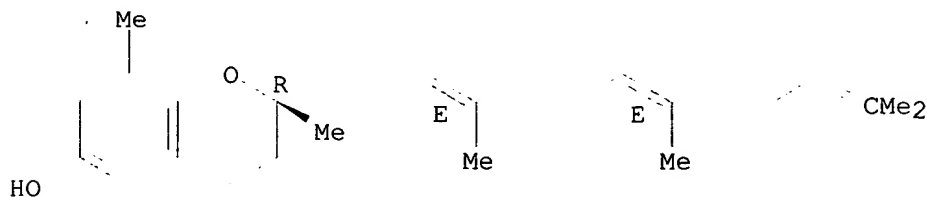


RN 21763-80-4 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-6,7-dimethoxy- (9CI) (CA INDEX NAME)



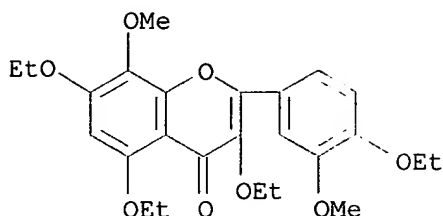
RN 25612-59-3 HCAPLUS  
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,8-dimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrienyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



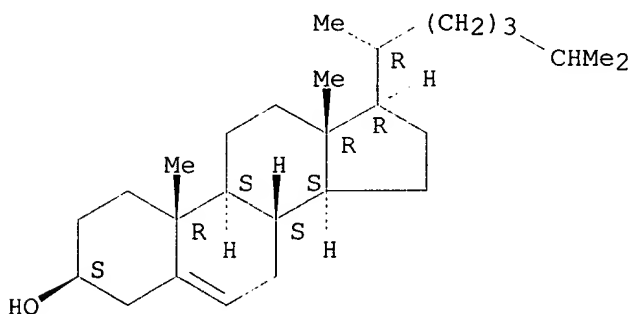
RN 95943-97-8 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 3,5,7-triethoxy-2-(4-ethoxy-3-methoxyphenyl)-8-

methoxy- (9CI) (CA INDEX NAME)



IT 57-88-5, **Cholesterol**, biological studies  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
 (Biological study); PROC (Process)  
 (polymethoxyflavones for cardiovascular disease treatment)  
 RN 57-88-5 HCAPLUS  
 CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L124 ANSWER 8 OF 39 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 2  
 ACCESSION NUMBER: 2001:338337 HCAPLUS  
 DOCUMENT NUMBER: 134:357559  
 TITLE: Modification of **cholesterol** concentrations  
 with citrus phytochemicals  
 INVENTOR(S): McGill, Carla R.; Green, Nancy R.  
 PATENT ASSIGNEE(S): Tropicana Products, Inc., USA  
 SOURCE: PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001032160	A2	20010510	WO 2000-US41784	20001101
WO 2001032160	A3	20020321		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,  
 CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI,  
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
 KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,  
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR,  
 TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002006953 A1 20020117 US 1999-435304 19991105

PRIORITY APPLN. INFO.:

US 1999-435304 A 19991105

AB Methods, products and compns. are provided which, when administered to a mammal, including humans, raises HDL serum cholesterol levels, while typically also lowering the ratio of LDL to HDL serum cholesterol levels. An effective amt. of one or more of a monoterpene, a terpene and a flavonoid are included in the treatment compn.

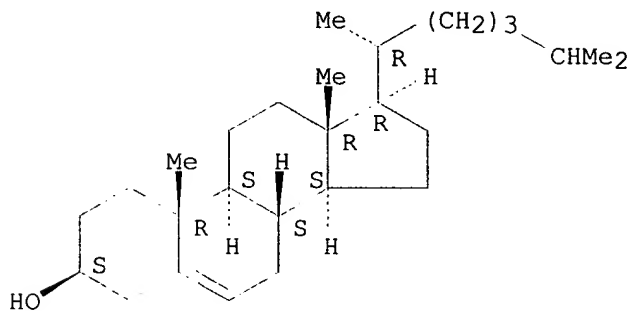
IT 57-88-5D, Cholesterol, HDL conjugates

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); MFM (Metabolic formation); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); USES (Uses) (modification of **cholesterol** concns. with citrus phytochems.)

RN 57-88-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

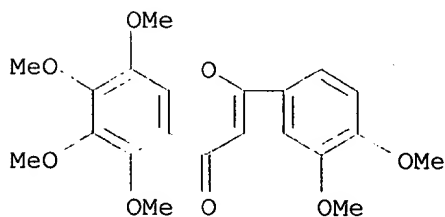


IT 478-01-3, Nobiletin 481-53-8,  
Tangeretin 2306-27-6, Sinensetin  
7741-47-1

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); **THU (Therapeutic use)**; BIOL (Biological study); OCCU (Occurrence); PROC (Process); USES (Uses) (modification of **cholesterol** concns. with citrus phytochems.)

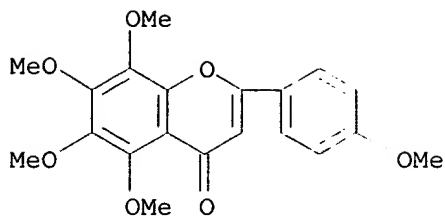
RN 478-01-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



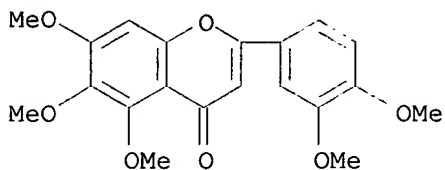
RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)



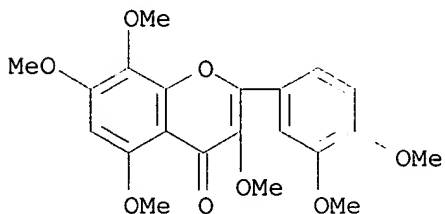
RN 2306-27-6 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7-trimethoxy- (9CI)  
(CA INDEX NAME)



RN 7741-47-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3,5,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



L124 ANSWER 9 OF 39 HCAPLUS COPYRIGHT 2002 ACS

DUPLICATE 3

ACCESSION NUMBER: 2000:240940 HCAPLUS

DOCUMENT NUMBER: 132:260708

TITLE: Compositions and methods of inhibiting neoplastic and cardiovascular diseases with compounds related to limocitrin and 5-desmethyl sinensetin

INVENTOR(S): Guthrie, Najla; Manthey, John A.; Horowitz, Robert M.

PATENT ASSIGNEE(S): KGK Synergize, Can.; Usda-Ars-Ott

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000019998	A1	20000413	WO 1999-US23238	19991005
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9962916 A1 20000426 AU 1999-62916 19991005

EP 1119353 A1 20010801 EP 1999-950209 19991005

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-167634 A 19981006

WO 1999-US23238 W 19991005

AB Compns. and methods for the prevention and treatment of neoplastic diseases and cardiovascular diseases (e.g. atherosclerosis) are described. Individuals at a high risk of developing or having neoplasia or atherosclerosis undergoing conventional therapies may be treated with an ED of limocitrin compds. including, but not limited to e.g. 3,5,7,4'-tetramethoxylimocitrin, limocitrin and 5-desmethylinensetin.

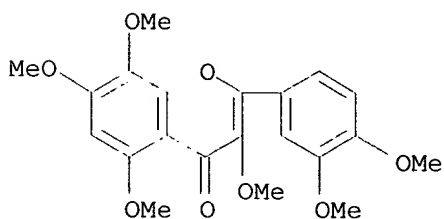
IT 7741-47-1P 14965-12-9P 95943-97-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(limocitrin derivs. and desmethyl sinensetin for inhibition of neoplastic and cardiovascular diseases)

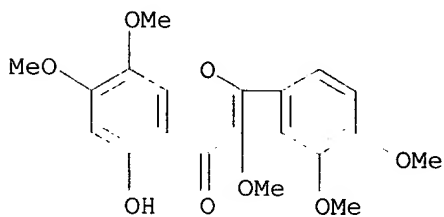
RN 7741-47-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3,5,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



RN 14965-12-9 HCAPLUS

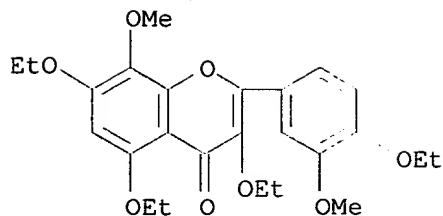
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-3,7,8-trimethoxy- (9CI)  
(CA INDEX NAME)



RN 95943-97-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3,5,7-triethoxy-2-(4-ethoxy-3-methoxyphenyl)-8-methoxy- (9CI)  
(CA INDEX NAME)



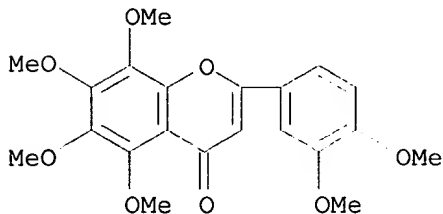


IT 478-01-3, Nobiletin 481-53-8,  
Tangeretin 1244-78-6 1247-97-8, Quercetin  
pentamethyl ether 1486-56-2 2174-59-6  
2306-27-6, Sinensetin 6601-66-7  
21763-80-4

RL: BAC (Biological activity or effector, except adverse); BSU  
(Biological study, unclassified); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(limocitrin derivs. and desmethyl sinensetin for inhibition  
of neoplastic and cardiovascular diseases)

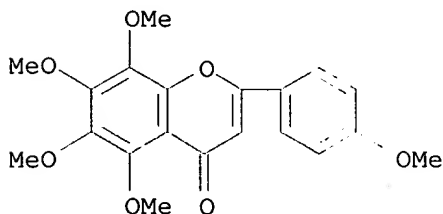
RN 478-01-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



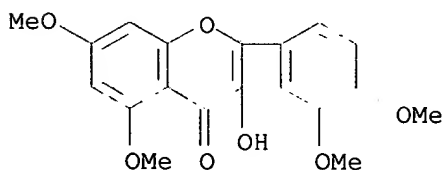
RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)

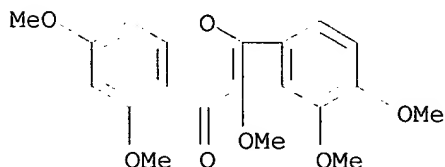


RN 1244-78-6 HCAPLUS

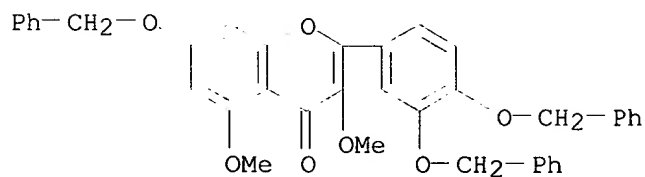
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3-hydroxy-5,7-dimethoxy-  
(9CI) (CA INDEX NAME)



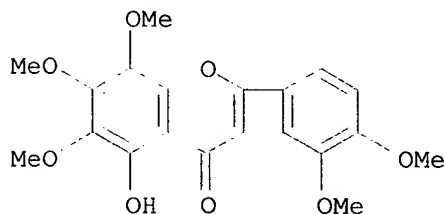
RN 1247-97-8 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-3,5,7-trimethoxy- (9CI)  
(CA INDEX NAME)



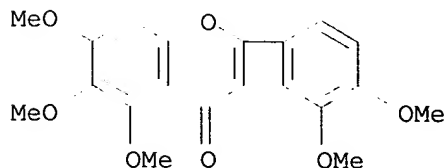
RN 1486-56-2 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-[3,4-bis(phenylmethoxy)phenyl]-3,5-dimethoxy-7-(phenylmethoxy)- (9CI) (CA INDEX NAME)



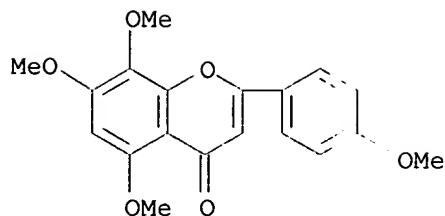
RN 2174-59-6 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-6,7,8-trimethoxy- (9CI) (CA INDEX NAME)



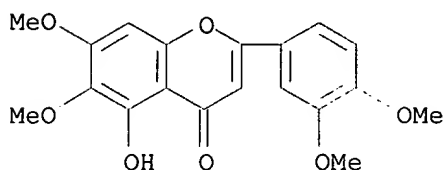
RN 2306-27-6 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7-trimethoxy- (9CI)  
(CA INDEX NAME)



RN 6601-66-7 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 5,7,8-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 21763-80-4 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-6,7-dimethoxy-  
(9CI) (CA INDEX NAME)



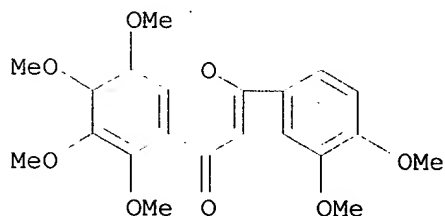
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L124 ANSWER 10 OF 39 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 4  
ACCESSION NUMBER: 1999:231499 HCAPLUS  
DOCUMENT NUMBER: 130:262145  
TITLE: Use of citrus limonoids and flavonoids as well as  
tocotrienols for the treatment of cancer and  
hypercholesterolemia  
INVENTOR(S): Carrol, Kenneth Kitchener; Kurowska, Elzbieta Maria  
PATENT ASSIGNEE(S): KGK Synergize Inc., Can.; Carroll, Margaret Aileen;  
Guthrie, Najla  
SOURCE: PCT Int. Appl., 31 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

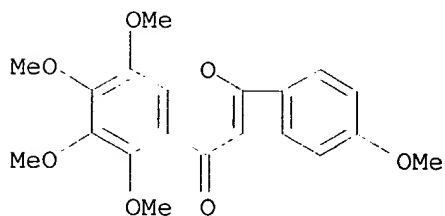
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9915167	A2	19990401	WO 1998-IB1721	19980924
WO 9915167	A3	19990701		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6251400	B1	20010626	US 1997-938640	19970926
CA 2304202	AA	19990401	CA 1998-2304202	19980924
AU 9894557	A1	19990412	AU 1998-94557	19980924
EP 1049464	A2	20001108	EP 1998-947740	19980924
R:	AT, DE, FR, GB, IT, NL			
PRIORITY APPLN. INFO.:			US 1997-938640 A 19970926	
			WO 1998-IB1721 W 19980924	
AB	Compns. and methods for the prevention and treatment of neoplastic			

diseases and hypercholesterolemia are described. Individuals at a high risk of developing or having neoplasia or hypercholesterolemia undergoing conventional therapies may be treated with an ED of triterpene derivs. in citrus limonoids, polyphenolic flavonoid citrus compds., **tocotrienols** or a combination of these agents.

IT 478-01-3, **Nobiletin** 481-53-8,  
**Tangeretin** 1721-51-3, .alpha.-**Tocotrienol**  
 6829-55-6, **Tocotrienol** 14101-61-2, .gamma.-  
**Tocotrienol** 25612-59-3, .delta.-**Tocotrienol**  
 RL: **BAC (Biological activity or effector, except adverse)**; **BSU**  
 (Biological study, unclassified); **THU (Therapeutic use)**; **BIOL**  
 (Biological study); **USES (Uses)**  
 (citrus limonoids and flavonoids as well as **tocotrienols** for  
 treatment of cancer and hypercholesterolemia)  
 RN 478-01-3 HCAPLUS  
 CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
 (CA INDEX NAME)

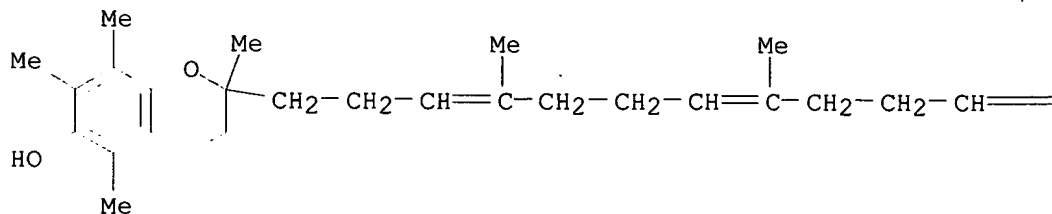


RN 481-53-8 HCAPLUS  
 CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
 (CA INDEX NAME)



RN 1721-51-3 HCAPLUS  
 CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



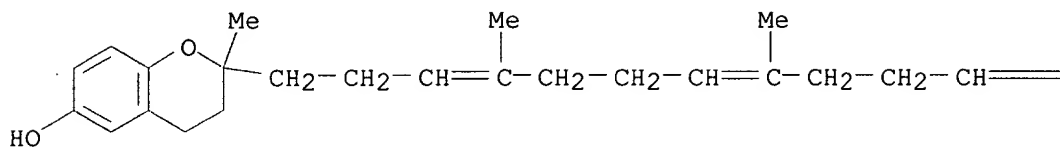
PAGE 1-B

= CMe<sub>2</sub>

RN 6829-55-6 HCAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2-methyl-2-(4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



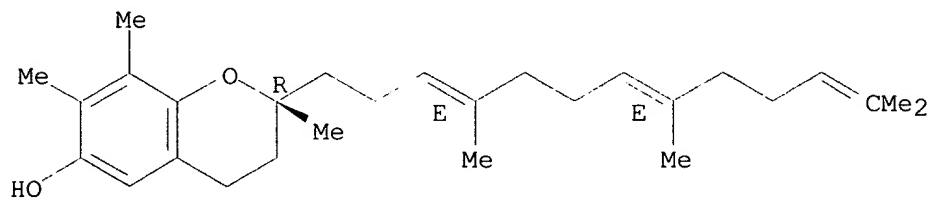
PAGE 1-B

= CMe<sub>2</sub>

RN 14101-61-2 HCAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,7,8-trimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrienyl]-, (2R)- (9CI) (CA INDEX NAME)

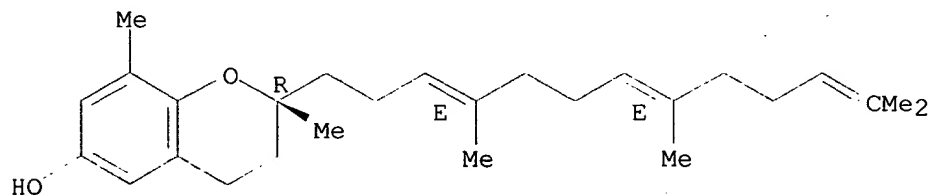
Absolute stereochemistry.  
Double bond geometry as shown.



RN 25612-59-3 HCAPLUS

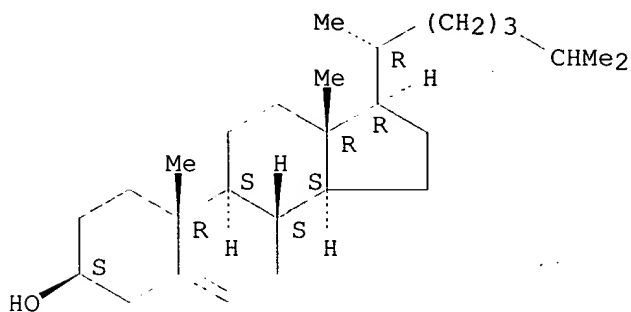
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,8-dimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrienyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



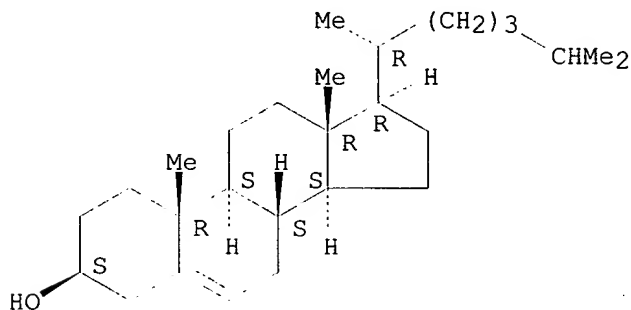
IT 57-88-5, **Cholesterol**, biological studies  
57-88-5D, **Cholesterol**, esters  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(citrus limonoids and flavonoids as well as **tocotrienols** for  
treatment of cancer and hypercholesterolemia)  
RN 57-88-5 HCAPLUS  
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 57-88-5 HCAPLUS  
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L124 ANSWER 11 OF 39 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2001:392055 HCAPLUS  
DOCUMENT NUMBER: 135:10008  
TITLE: Compositions and methods for treatment of neoplastic  
diseases with combinations of limonoids, flavonoids  
and **tocotrienols**  
INVENTOR(S): Guthrie, Najla; Kurowska, Elzbieta Maria  
PATENT ASSIGNEE(S): KGK Synergize, Can.  
SOURCE: U.S., 7 pp., Cont.-in-part of U.S. Ser. No. 938,640,  
abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6239114	B1	20010529	US 2000-481963	20000112
US 6251400	B1	20010626	US 1997-938640	19970926

WO 2001051043 A2 20010719 WO 2001-IB186 20010112  
WO 2001051043 A3 20020530

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 1997-938640 B2 19970926

US 2000-481963 A 20000112

AB Compns. and methods for the prevention and treatment of neoplastic diseases using a synergistic combination of triterpenes are described. Individuals at a high risk of developing or having neoplasia undergoing conventional therapies may be treated with an ED of triterpene derivs., i.e., limonoids (1-500 mg/day), flavonoids (200-5000 mg/day), **tocotrienols** (1-1200 mg/day) or a combination of these agents. For example, in the DU 145 prostatic tumor cell line, **tangeretin** alone or nobitelin alone inhibited these cells most effectively followed by nomilin when the test agents were given alone. When given as combinations, the most effective combination was nomilin + hesperitin + .alpha.-**tocotrienol**, followed by limolin + nobelitin + .alpha.-**tocotrienol** and nomilin + naringenin, followed by nomilin + hesperitin + .alpha.-**tocotrienol** and limonin + **tangeretin** + .alpha.-tocopherol, followed by nomilin + **tangeretin** and limonin + **tangeretin**, followed by limonin + naringenin.

IT 478-01-3, Nobiletin 481-53-8,  
Tangeretin 1721-51-3, .alpha.-Tocotrienol  
6829-55-6, Tocotrienol 14101-61-2, .gamma.-  
Tocotrienol 25612-59-3, .delta.-Tocotrienol

RL: BAC (Biological activity or effector, except adverse); BSU

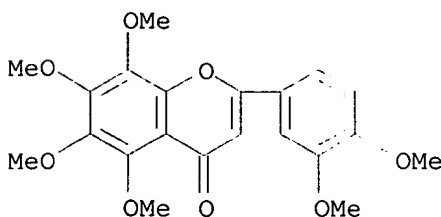
(Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(compns. of synergistic combinations of limonoids, flavonoids and  
**tocotrienols** for treatment of neoplastic diseases)

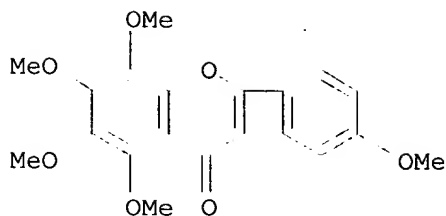
RN 478-01-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



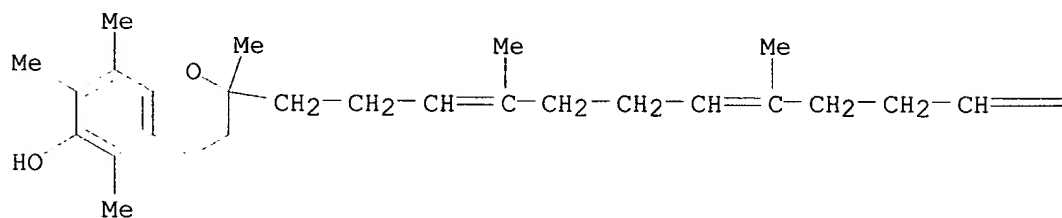
RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)



RN 1721-51-3 HCAPLUS  
 CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

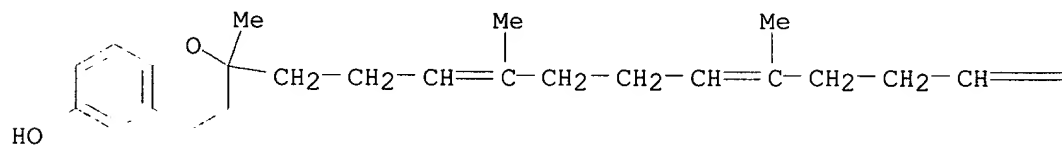


PAGE 1-B

=CMe<sub>2</sub>

RN 6829-55-6 HCAPLUS  
 CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2-methyl-2-(4,8,12-trimethyl-3,7,11-tridecatrienyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

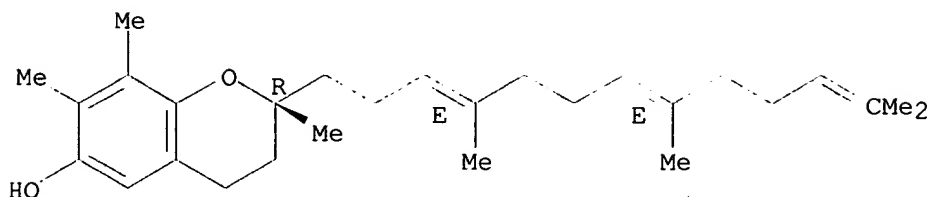
=CMe<sub>2</sub>

RN 14101-61-2 HCAPLUS  
 CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,7,8-trimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrienyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



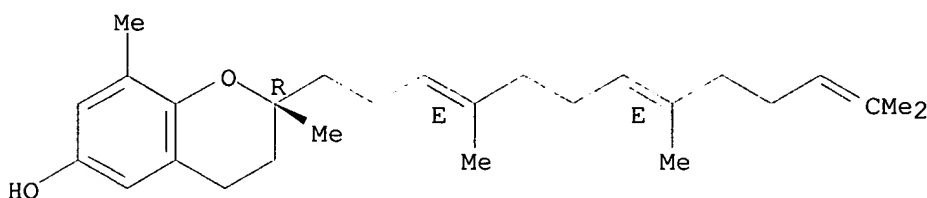
Double bond geometry as shown.



RN 25612-59-3 HCAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,8-dimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrienyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L124 ANSWER 12 OF 39 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:626002 HCAPLUS

DOCUMENT NUMBER: 135:185492

TITLE: Flavones for the treatment of COX-2 and/or NF.kappa.B-mediated diseases

INVENTOR(S): Wenzel, Uwe; Daniel, Hannelore

PATENT ASSIGNEE(S): Basf A. -G., Germany

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

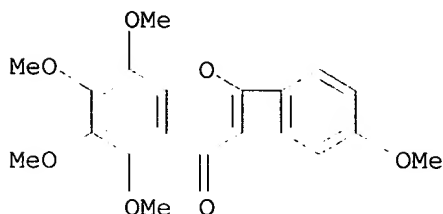
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001233768	A2	20010828	JP 2001-49370	20010223
EP 1127572	A2	20010829	EP 2001-103200	20010212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2001046963	A1	20011129	US 2001-782306	20010214
CN 1318371	A	20011024	CN 2001-116513	20010225
PRIORITY APPLN. INFO.:		US 2000-185179P P 20000225		
OTHER SOURCE(S):		MARPAT 135:185492		
AB	This invention relates to the use of flavone or derivs. thereof for the treatment of diseases mediated by cyclooxygenase-2 or NF.kappa.B. The flavones can be administered in oral dosage forms or foods.			
IT	481-53-8, Tangeretin			
RL:	BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (flavones for treatment of COX-2 and/or NF.kappa.B-mediated diseases)			
RN	481-53-8 HCAPLUS			

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)



L124 ANSWER 13 OF 39 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:179725 HCAPLUS

DOCUMENT NUMBER: 132:227425

TITLE: Pharmaceuticals and foods containing flavonoids as inhibitors of formation of matrix metalloproteinase (MMP) and its precursor

INVENTOR(S): Yano, Masamitsu; Ogawa, Kazunori; Yoshida, Toshio; Nezumi, Hirohisa; Nonomura, Mutsuko; Ishiwa, Atsushi; Sato, Takashi; Mitsumaki, Yoshihiro; Sashida, Yutaka; Ito, Akira

PATENT ASSIGNEE(S): Ministry of Agriculture and Forestry National Fruits Experiment Station, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000080035	A2	20000321	JP 1998-248145	19980902
JP 3010210	B2	20000221		

OTHER SOURCE(S): MARPAT 132:227425

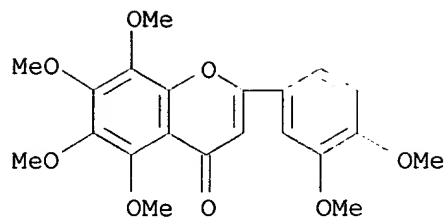
AB The pharmaceuticals and foods are claimed. They are useful for treatment of chronic rheumatoid arthritis, osteoarthritis, tumor, arteriosclerosis, aneurysm, hepatic cirrhosis, ulcer, osteoporosis, pulmonary fibrosis, glomerular nephritis, and periodontitis. Nobiletin inhibited IL-1.alpha.-induced proMMP-9 formation as strongly as dexamethasone without affecting formation of proMMP-2.

IT 478-01-3P, Nobiletin 481-53-8P,  
Tangeretin 2174-59-6P, 5-Demethylnobiletin  
2306-27-6P 6601-66-7P

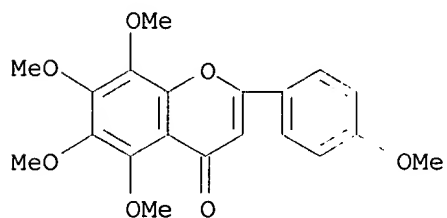
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(citrus flavonoids as inhibitors of formation of matrix metalloproteinase for treatment of diseases)

RN 478-01-3 HCAPLUS

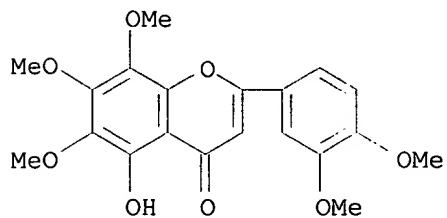
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7,8-tetramethoxy- (9CI)  
(CA INDEX NAME)



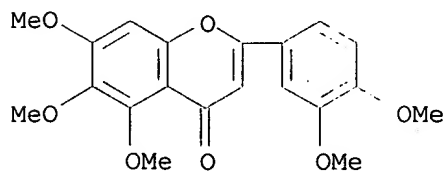
RN 481-53-8 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI)  
(CA INDEX NAME)



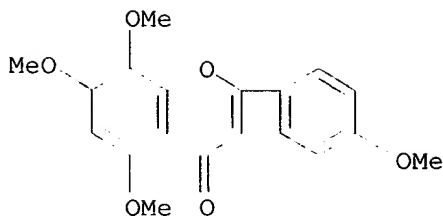
RN 2174-59-6 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-6,7,8-trimethoxy- (9CI)  
(CA INDEX NAME)



RN 2306-27-6 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5,6,7-trimethoxy- (9CI)  
(CA INDEX NAME)



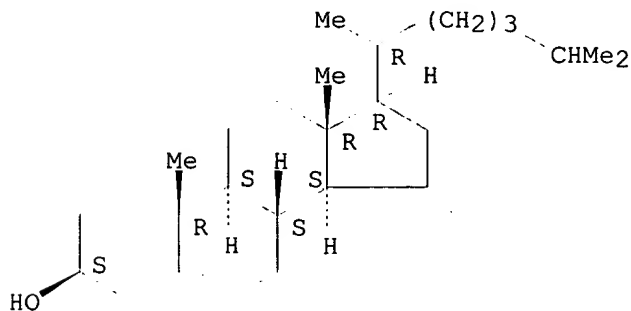
RN 6601-66-7 HCAPLUS  
CN 4H-1-Benzopyran-4-one, 5,7,8-trimethoxy-2-(4-methoxyphenyl)- (9CI) (CA  
INDEX NAME)



L124 ANSWER 14 OF 39 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1999:708599 HCAPLUS  
 DOCUMENT NUMBER: 131:317792  
 TITLE: Method of treatment of glutathione deficient mammals  
 INVENTOR(S): Keller, M. D. Robert H.; Kirchenbaum, David W.  
 PATENT ASSIGNEE(S): Vit-Immune, L.C., USA  
 SOURCE: PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English.  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9955326	A1	19991104	WO 1999-US9485	19990429
W: CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6262019	B1	20010717	US 1999-302217	19990429
PRIORITY APPLN. INFO.:		US 1998-83661P P 19980430		
AB Glutathione is a tripeptide of extreme importance as a catalyst, reductant, and reactant. The disclosure is of a unique combination of nutritional supplements including N-acetylcysteine, vitamin C, L-glucosamine, N-acetyl-D-glucosamine, <b>quercetin</b> , sylimarin, .alpha.-lipoic acid, and high-protein, low-fat whey that are combined to support various bodily systems involved in glutathione synthesis, reutilization and storage, all intended to elevate glutathione concn. in the mammalian cell.				
IT 57-88-5, <b>Cholesterol</b> , biological studies				
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)				
(glutathione deficiency treatment compn. and method)				
RN 57-88-5 HCAPLUS				
CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)				

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L124 ANSWER 15 OF 39 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:31416 HCAPLUS

DOCUMENT NUMBER: 128:88155

TITLE: Method of screening foods for nutraceuticals

INVENTOR(S): Ghai, Geetha; Boyd, Charles; Csiszar, Katalin; Ho, Chi-Tang; Rosen, Robert T.

PATENT ASSIGNEE(S): Rutgers, the State University of New Jersey, USA; Ghai, Geetha; Boyd, Charles; Csiszar, Katalin; Ho, Chi-Tang; Rosen, Robert T.

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9748823	A1	19971224	WO 1997-US10368	19970620
W:	AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
US 5955269	A	19990921	US 1996-670826	19960620
CA 2258821	AA	19971224	CA 1997-2258821	19970620
AU 9733950	A1	19980107	AU 1997-33950	19970620
EP 954609	A1	19991110	EP 1997-930022	19970620
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
PRIORITY APPLN. INFO.:			US 1996-670826	19960620
			WO 1997-US10368	19970620

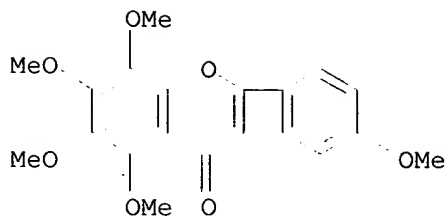
AB The invention relates to an assay system for screening nutraceuticals, i.e., foods or food substances that occur naturally, or that are produced during processing which are capable of modulating in a subject the expression of one or more genes assocd. with a disease or undesirable condition. The effect of nutraceuticals on lysyl oxidase promoter activity is shown in the figure. The nutraceuticals identified by the screening assays can be incorporated into compns. which may be administered to a subject to treat or prevent a disease or undesirable condition, or otherwise to improve the health of the subject. The invention also provides methods for detg. the effect of a food or food substance on the expression of disease-related genes. The invention further provides methods for modifying the amt. of nutraceuticals in raw and processed foods or food substances.

IT 481-53-8, Tangeretin

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (method of screening foods for nutraceuticals)

RN 481-53-8 HCAPLUS

CN 4H-1-Benzopyran-4-one, 5,6,7,8-tetramethoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L124 ANSWER 16 OF 39 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1996:161229 HCAPLUS  
DOCUMENT NUMBER: 124:185594  
TITLE: Pharmaceutical and cosmetic formulations containing  
esculose  
INVENTOR(S): Bombardelli, Ezio; Cristoni, Aldo; Morazzoni, Paolo  
PATENT ASSIGNEE(S): Indena S.p.A., Italy  
SOURCE: Eur. Pat. Appl., 8 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 692250	A2	19960117	EP 1995-110463	19950705
EP 692250	A3	19961023		
EP 692250	B1	20020605		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2153604	AA	19960113	CA 1995-2153604	19950711
AU 9524919	A1	19960125	AU 1995-24919	19950711
AU 686381	B2	19980205		
JP 08169896	A2	19960702	JP 1995-174658	19950711
PRIORITY APPLN. INFO.:		IT 1994-MI1446 A 19940712		

AB Esculose (I) alone or in combination with adenylate cyclase stimulators, such as forskolin or Salvia miltiorrhiza diterpenes and/or with phosphodiesterase inhibitors, such as apigenin-skeleton dimeric flavones are used in topical formulations for the treatment of peripheral vasculopathies related to an impaired peripheral microcirculation, cellulitis or unesthetisms connected with a deposit of superfluous fat. For the redn. of the deposits of superfluous fat of any origin, the above mentioned products are advantageously also combined with caffeine, theophylline and derivs. thereof. Efficacy of 1.5% I in treatment of patients affected with venous insufficiency is reported. A gel contained S. miltiorrhiza ext. 0.30, I 1.50, Ginkgo biloba dimeric flavones 0.50, hydrogenated ethoxylated castor oil 1.00, propylene glycol 1.50, preservatives 0.10, hydroxyethyl cellulose 3.00, and purified water q.s. 100g.

L124 ANSWER 17 OF 39 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1996:151191 HCAPLUS  
DOCUMENT NUMBER: 124:278479  
TITLE: Anticholesteremic effect of flavonoid derivatives in rats  
AUTHOR(S): Nagem, Tanus Jorge; de Oliveira, Tania Toledo; da Silva, Marilda Conceicao; Guedes de Miranda, Luiz Carlos  
CORPORATE SOURCE: Departamento de Quimica, UFV, Vicoso, 36570-000, Brazil  
SOURCE: Arq. Biol. Tecnol. (1995), Volume Date 1995, 38(3),

859-68

CODEN: ABTTAP; ISSN: 0365-0979

DOCUMENT TYPE:

Journal

LANGUAGE:

Portuguese

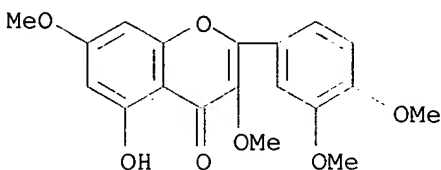
AB O-Me and acetyl derivs. of morin, naringenin, quercetin and rutin isolated from soya cultivar UFV-5' were prepd., identified by UV, IR, NMR and tested in rats against cholesterol. Animals that were administered quercetin derivs. and methylated rutin showed lowest concns. of lipids in the bloodstream and highest concns. of biliary salts.

IT 1245-15-4P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(anticholesteremic effect of flavonoid derivs. in rats)

RN 1245-15-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethoxyphenyl)-5-hydroxy-3,7-dimethoxy-(9CI) (CA INDEX NAME)



L124 ANSWER 18 OF 39 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1977:577782 HCAPLUS

DOCUMENT NUMBER: 87:177782

TITLE: Effect of flavonoids and galascorbin on some catabolic processes and **cholesterol** removal during experimentally-induced hypercholesteremia

AUTHOR(S): Kiyasheva, T. Zh.

CORPORATE SOURCE: Karagand. Med. Inst., Karaganda, USSR

SOURCE: Fiziol. Patol. Organov Pishchevareniya (1974), 71-5.

Editor(s): Dauletbakova, M. I. Karagand. Gos. Med.

Inst.: Karaganda, USSR.

CODEN: 36MOAH

DOCUMENT TYPE:

Conference

LANGUAGE:

Russian

AB Feeding an atherogenic diet for 30 days to rats increased the excretion of cholesterol [57-88-5] and cholic acid [81-25-4] in bile and of cholesterol and total steroids in feces. Rutin [153-18-4] (100 or 200 mg/kg), **quercetin** [117-39-5] (200 mg/kg), or galascorbin [8065-60-9] (100 mg/kg) given orally simultaneously with the atherogenic diet further increased cholesterol and cholic acid excretion in the bile and cholesterol and steroid excretion in the feces. Apparently, the flavonoids and galascorbin affect liver function rather than inhibit absorption of cholesterol and cholic acid by the intestine.

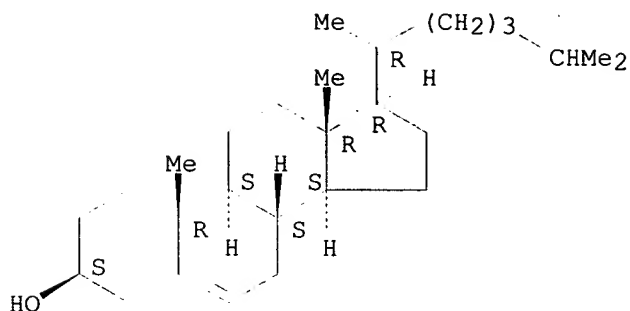
IT 57-88-5, biological studies

RL: BIOL (Biological study)  
(of blood serum, flavonoids and galascorbin effect on)

RN 57-88-5 HCAPLUS

CN Cholest-5-en-3-ol (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L124 ANSWER 19 OF 39 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1966:432882 HCAPLUS

DOCUMENT NUMBER: 65:32882

ORIGINAL REFERENCE NO.: 65:6141c-d

TITLE: Effect of a preparation of common onion skin on the **cholesterol** content of blood and aorta in

AUTHOR(S): Lisevitskaya, L. I.; Bardyukova, V. A.; Shinkarenko, A. L.

CORPORATE SOURCE: Pharm. Inst., Pyatigorsk

SOURCE: Nauchn. Dokl. Vysshei Shkoly, Biol. Nauki (1966), (2), 78-9

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Exptl. hypercholesterolemia was induced in rats by addn. of 600 mg. cholesterol (I) and 90 mg. methylthiouracil (II/kg. body wt./day). Thus, the content of I in the blood had increased to 95 and 140 mg. % after 1 and 2 months, resp. (control animals 45-50 mg. %). Addn. of a prepn. of common onion (*Allium cepa*) skin (5 mg./kg. body wt./day) contg. the whole of polyphenolic compds. with 30% **quercitin**, decreased the concn. of I to normal after 1.5 months, though the application of I and II was continued. Detn. of I in the aorta gave the same value (106-110 mg. %) for control animals and those treated with I, II, and onion prepn., whereas in rats supplied only with I and II 186 mg. % was found.

L124 ANSWER 20 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002124874 EMBASE

TITLE: Ventricular remodeling by **Scutellarein** treatment  
in spontaneously hypertensive rats.

AUTHOR: Zhou J.; Lei H.; Chen Y.; Li F.; Ma C.

CORPORATE SOURCE: J. Zhou, Department of Internal Medicine, The First  
Affiliated Hospital, Chongqing Univ. of Medical Sciences,  
Chongqing 400016, China

SOURCE: Chinese Medical Journal, (2002) 115/3 (375-377).

Refs: 5

ISSN: 0366-6999 CODEN: CMDJAE

COUNTRY: China

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery

030 Pharmacology

037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

**Objective.** To observe reversal of ventricular remodeling by the protein kinase



C inhibitor **Scutellarein** in spontaneously hypertensive rats (SHRs).

Methods. Twelve SHRs were randomly divided into two groups.

\*\*\***Scutellarein**\*\*\* and saline (10 mg.ovrhdot.kg(-1).ovrhdot.d(-1)) were given by intraperitoneal injection to two groups of rats separately. Systolic blood pressure (SBP) and ventricular weight index (LVW/BW, RVW/BW) were measured. A polarization microscope and an image analyzer system (IAS) were used to observe changes in cardiovascular structure and to count the content of cardiac muscle interstitial collagen. Results. The pathologic changes in the left ventricle in the **Scutellarein** group rats (SHR(D)) improved to varying degrees, including hypertrophy of the cardiac muscle and collagen volume fraction.

Conclusion. **Scutellarein** can reverse ventricular remodeling, improve myocardial stiffness and protect heart cardiac muscle.

CONTROLLED TERM: Medical Descriptors:

\***essential hypertension: DT, drug therapy**

\*heart ventricle remodeling  
spontaneously hypertensive rat  
dose response  
systolic blood pressure  
heart weight  
body weight  
polarization microscope  
image analysis  
heart muscle

**heart ventricle hypertrophy**

heart protection  
nonhuman  
rat  
animal experiment  
animal model  
controlled study  
animal tissue  
article

Drug Descriptors:

\***scutellarein: DO, drug dose**

\***scutellarein: DT, drug therapy**

\***scutellarein: PD, pharmacology**

\***scutellarein: IP, intraperitoneal drug**

**administration**

protein kinase C inhibitor: DO, drug dose

**protein kinase C inhibitor: DT, drug therapy**

**protein kinase C inhibitor: PD, pharmacology**

protein kinase C inhibitor: IP, intraperitoneal drug

**administration**

sodium chloride

collagen: EC, endogenous compound

CAS REGISTRY NO.: (**scutellarein**) 529-53-3; (sodium chloride)

7647-14-5; (collagen) 9007-34-5

L124 ANSWER 21 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2002180565 EMBASE

TITLE: Regulation of lipoprotein metabolism in HepG2 cells by citrus flavonoids.

AUTHOR: Kurowska E.M.; Manthey J.A.

CORPORATE SOURCE: E.M. Kurowska, KGK Synergize, Inc., 255 Queens Avenue, London, Ont. N6A 5R8, Canada

SOURCE: Advances in Experimental Medicine and Biology, (2002) 505/- (173-179).

Refs: 22

ISSN: 0065-2598 CODEN: AEMBAP

COUNTRY: United States

DOCUMENT TYPE: Journal; Conference Article

FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery

030 Pharmacology  
037 Drug Literature Index  
LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:  
    \*hypercholesterolemia  
    cell strain HepG2  
    lipoprotein metabolism  
    citrus fruit  
    orange (fruit)  
    grapefruit  
    orange juice  
    grapefruit juice  
    cholesterol metabolism  
    human  
    human cell  
    conference paper  
    priority journal  
Drug Descriptors:  
    \*flavonoid: PD, pharmacology  
    lipoprotein: EC, endogenous compound  
    isoflavone derivative: PD, pharmacology  
    genistein: PD, pharmacology  
    hesperetin: PD, pharmacology  
    naringenin: PD, pharmacology  
    hypocholesterolemic agent: PD, pharmacology  
    hesperidin: PD, pharmacology  
    aurantiin: PD, pharmacology  
    tangeretin: PD, pharmacology  
    nobiletin: PD, pharmacology  
    sinensetin: PD, pharmacology  
    scutellarein: PD, pharmacology  
    tetra o methylscutellarein: PD, pharmacology  
    antiinflammatory agent: PD, pharmacology  
    low density lipoprotein: EC, endogenous compound  
    high density lipoprotein: EC, endogenous compound  
    cholesterol: EC, endogenous compound  
    apolipoprotein B: EC, endogenous compound  
    3,5,6,7,8,3',4' heptamethoxyflavone: PD,  
    pharmacology  
    5 norsinensetin: PD, pharmacology  
    quercetin derivative: PD, pharmacology  
    quercetin 3,7,3',4' tetramethyl ether: PD,  
    pharmacology  
    quercetin 3,5,7,3',4' pentamethyl ether: PD,  
    pharmacology  
    unclassified drug

CAS REGISTRY NO.: (genistein) 446-72-0; (hesperetin) 520-33-2; (naringenin)  
480-41-1, 67604-48-2; (hesperidin) 520-26-3; (aurantiin)  
10236-47-2, 12619-61-3, 29658-83-1, 82350-96-7; (  
tangeretin) 481-53-8; (nobiletin  
) 478-01-3; (scutellarein) 529-53-3;  
(cholesterol) 57-88-5

L124 ANSWER 22 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 2002034023 EMBASE  
TITLE: Upregulation of interleukin-8 expression by prostaglandin  
D2 metabolite 15-deoxy-delta12, 14 prostaglandin J2  
(15d-PGJ2) in human THP-1 macrophages.  
AUTHOR: Fu Y.; Luo N.; Lopes-Virella M.F.  
CORPORATE SOURCE: Y. Fu, Department of Medicine, Strom Thurmond Biomedical  
Center, Medical University of South Carolina, 114 Doughty  
Street, Charleston, SC 29403-5729, United States.

SOURCE: fuy@musc.edu  
Atherosclerosis, (2002) 160/1 (11-20).  
Refs: 39  
ISSN: 0021-9150 CODEN: ATHSBL  
PUBLISHER IDENT.: S 0021-9150(01)00541-X  
COUNTRY: Ireland  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery  
030 Pharmacology  
037 Drug Literature Index  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ABSTRACT:

Interleukin-8 (IL-8) is one of cytokines detected at sites of inflammation and in macrophage-foam cells of atherosclerotic lesions. The expression of IL-8 gene can be induced in cholesterol loaded THP-1 macrophages by oxidized low density lipoprotein. We report for the first time that the expression of human IL-8 gene in THP-1 macrophages is upregulated in a time- and concentration-dependent manner by prostaglandin D2 metabolite 15-deoxy-delta12, 14 prostaglandin J2 (15d-PGJ2), which is a natural ligand for activation of peroxisome proliferator-activated receptor-gamma transcription factor. Studies to identify the signal transduction pathways involved showed that IL-8 upregulation-mediated by 15d-PGJ2 was markedly inhibited when the THP-1 macrophages were incubated with a highly selective and cell-permeable inhibitor of the mitogen-activated protein kinase 02 (MAPK) signaling pathway, 2'-amino-3'-methoxyflavone (PD98059). This inhibition was concentration-dependent, suggesting that 15d-PGJ2 regulates the expression of IL-8 gene in THP-1 macrophages through a MAPK signaling pathway. In contrast, THP-1 macrophages when treated with pyrrolidine dithiocarbamate, an anti-oxidant and the selective inhibitor for nuclear factor .kappa.B, showed an enhanced 15d-PGJ2-mediated upregulation of IL-8 gene expression. The data presented in this report may contribute to unravel some of the mechanisms behind the inflammatory component of atherosclerosis. .COPYRG. 2002 Elsevier Science Ireland Ltd. All rights reserved.

CONTROLLED TERM: Medical Descriptors:  
\*atherosclerosis  
\*signal transduction  
metabolite  
protein expression  
regulatory mechanism  
macrophage  
inflammation  
foam cell  
peroxisome  
incubation time  
concentration response  
gene expression  
human  
controlled study  
human cell  
article  
priority journal  
Drug Descriptors:  
\*interleukin 8: EC, endogenous compound  
\*prostaglandin D2: EC, endogenous compound  
\*delta12 prostaglandin J2: EC, endogenous compound  
\*2 (2 amino 3 methoxyphenyl)chromone: PD,  
pharmacology  
\*pyrrolidine dithiocarbamate: PD, pharmacology  
cholesterol: EC, endogenous compound  
ligand  
transcription factor: EC, endogenous compound

mitogen activated protein kinase  
immunoglobulin enhancer binding protein: EC, endogenous  
compound  
CAS REGISTRY NO.: (interleukin 8) 114308-91-7; (prostaglandin D2) 41598-07-6;  
(delta12 prostaglandin J2) 87893-54-7; (2 (2 amino 3  
methoxyphenyl)chromone) 167869-21-8; (cholesterol) 57-88-5;  
(mitogen activated protein kinase) 142243-02-5  
CHEMICAL NAME: (1) Pd 98059  
COMPANY NAME: (1) Calbiochem (United States)

L124 ANSWER 23 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 2002180550 EMBASE  
TITLE: Flavonoids in cell function.  
AUTHOR: Manthey J.A.; Buslig B.S.; Baker M.E.  
CORPORATE SOURCE: J.A. Manthey, U.S. Department of Agriculture, Citrus and  
Subtropical Products Lab., 600 Avenue S, NW, Winter Haven,  
FL 33881, United States  
SOURCE: Advances in Experimental Medicine and Biology, (2002) 505/-  
(1-7).  
Refs: 25  
ISSN: 0065-2598 CODEN: AEMBAP  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Conference Article  
FILE SEGMENT: 029 Clinical Biochemistry  
030 Pharmacology  
037 Drug Literature Index  
LANGUAGE: English

CONTROLLED TERM: Medical Descriptors:  
\*cell function  
microorganism  
higher plant  
pollen germination  
bell pepper  
citrus fruit  
fruit  
vegetable  
fruit juice  
estrogen activity  
antiinflammatory activity  
antioxidant activity  
    **ischemic heart disease**  
drug activity  
drug isolation  
phytochemistry  
human  
nonhuman  
conference paper  
priority journal  
Drug Descriptors:  
    **\*flavonoid: PD, pharmacology**  
    **\*isoflavonoid: PD, pharmacology**  
    **phenol derivative: PD, pharmacology**  
    **polyphenol derivative: PD, pharmacology**  
    **flavonol derivative: PD, pharmacology**  
galactosyltransferase: EC, endogenous compound  
flavonol 3 o galactosyltransferase: EC, endogenous compound  
indoleacetic acid: EC, endogenous compound  
alpha tocopherol  
    **antioxidant: PD, pharmacology**  
    **antithrombocytic agent: PD, pharmacology**  
    **catechin: PD, pharmacology**  
    **hesperidin: PD, pharmacology**

flavone derivative: PD, pharmacology  
methoxyflavone: PD, pharmacology  
tangeretin: PD, pharmacology  
uvomorulin: EC, endogenous compound  
catenin: EC, endogenous compound  
interleukin 2 receptor: EC, endogenous compound  
tamoxifen  
immunosuppressive agent  
xanthine oxidase: EC, endogenous compound  
xanthine dehydrogenase: EC, endogenous compound  
steroid receptor: EC, endogenous compound  
estrogen: EC, endogenous compound  
phytoestrogen: PD, pharmacology  
testosterone 17beta dehydrogenase: EC, endogenous compound  
adenosine receptor: EC, endogenous compound  
adenosine: EC, endogenous compound  
unindexed drug  
unclassified drug  
CAS REGISTRY NO.: (galactosyltransferase) 9031-68-9; (indoleacetic acid) 32536-43-9, 87-51-4; (alpha tocopherol) 1406-18-4, 1406-70-8, 52225-20-4, 58-95-7, 59-02-9; (catechin) 13392-26-2, 154-23-4; (hesperidin) 520-26-3; (tangeretin) 481-53-8; (uvomorulin) 112956-45-3; (tamoxifen) 10540-29-1; (xanthine oxidase) 9002-17-9; (xanthine dehydrogenase) 9054-84-6; (testosterone 17beta dehydrogenase) 9028-62-0; (adenosine) 58-61-7

L124 ANSWER 24 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 2000146748 EMBASE  
TITLE: Effects of **Scutellarein** on diabetic rat aorta.  
AUTHOR: Zhu B.-H.; Guan Y.-Y.; He H.; Lin M.-J.  
CORPORATE SOURCE: Dr. B.-H. Zhu, Department of Pharmacology, Sun Yat-Sen Univ. of Med. Sciences, Guangzhou 510089, China. sszhu@gzsums.edu.cn  
SOURCE: Acta Pharmacologica Sinica, (2000) 21/4 (353-356).  
Refs: 14  
ISSN: 0253-9756 CODEN: CYLPDN  
COUNTRY: China  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 003 Endocrinology  
018 Cardiovascular Diseases and Cardiovascular Surgery  
030 Pharmacology  
037 Drug Literature Index  
LANGUAGE: English  
SUMMARY LANGUAGE: English; Chinese  
ABSTRACT:  
AIM: To study the effect of **Scutellarein** (Scu) on the diabetic rat aorta. METHODS: Contractile responses to phenylephrine and endothelium-dependent relaxation responses to acetylcholine (ACh) in rat aorta were investigated after streptozocin-induced 6-wk diabetes, Scu-treated streptozocin-induced diabetes, and in age-matched control in vitro. RESULTS: 1) Endothelium-dependent relaxation to ACh in diabetic rats was decreased ( $P < 0.01$ ) compared with age-matched control. 2) Contractile responses to phenylephrine were increased ( $P < 0.01$ ) in diabetic rats. 3) The dietary supplement of 0.5 % Scu starting from 1-wk diabetes induction prevented endothelial dysfunction ( $P < 0.01$ ), but the contractile responses to phenylephrine were further increased. CONCLUSION: Scu prevented vascular endothelial dysfunction in diabetic rats, and also potentiated the contraction induced by phenylephrine.  
CONTROLLED TERM: Medical Descriptors:  
\*thoracic aorta

\*streptozocin diabetes  
  \*diabetic angiopathy: DT, drug therapy  
  \*diabetic angiopathy: PC, prevention  
  \*endothelium injury: DT, drug therapy  
  \*endothelium injury: PC, prevention  
vascular endothelium  
vasoconstriction  
vasodilatation  
treatment outcome  
nonhuman  
male  
rat  
animal experiment  
animal model  
controlled study  
animal tissue  
article  
Drug Descriptors:  
  \*scutellarein: IT, drug interaction  
  \*scutellarein: DT, drug therapy  
  \*scutellarein: PD, pharmacology  
  \*scutellarein: PO, oral drug administration  
phenylephrine: IT, drug interaction  
  phenylephrine: PD, pharmacology  
acetylcholine  
streptozocin

CAS REGISTRY NO.: (scutellarein) 529-53-3; (phenylephrine)  
532-38-7, 59-42-7, 61-76-7; (acetylcholine) 51-84-3,  
60-31-1, 66-23-9; (streptozocin) 18883-66-4

COMPANY NAME: Otsuka; Sigma

L124 ANSWER 25 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2000037681 EMBASE

TITLE: Hepatocellular carcinoma.

AUTHOR: Badvie S.

CORPORATE SOURCE: S. Badvie, Surgical Unit, St. Thomas's Hospital, Lambeth  
Palace Road, London SE1, United Kingdom

SOURCE: Postgraduate Medical Journal, (2000) 76/891 (4-11).

Refs: 108

ISSN: 0032-5473 CODEN: PGMJAO

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 016 Cancer  
048 Gastroenterology  
026 Immunology, Serology and Transplantation  
037 Drug Literature Index  
014 Radiology

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

Primary hepatocellular carcinoma is one of the 10 most common tumours, and the most common primary liver malignancy, in the world. In the majority of cases, it occurs against a background of hepatitis B or C viral infection and/or liver cirrhosis, and is associated with a dismal prognosis of a few months. Current treatments in routine clinical practice are surgical resection and liver transplantation, but these therapies are applicable to only a small proportion of patients and prolongation of survival is restricted. Other treatment options include intra-arterial chemotherapy, transcatheter arterial chemoembolisation, percutaneous ethanol injection, cryotherapy, thermotherapy, proton therapy, or a wide range of their possible combinations. The current lack of definitive data, however, limits the use of these therapies. Another option is gene therapy, which although in its infancy at the present time, may have a significant role to play in the future management of hepatocellular carcinoma.

## CONTROLLED TERM:

## Medical Descriptors:

- \*liver cell carcinoma: DI, diagnosis
- \*liver cell carcinoma: SU, surgery
- \*liver cell carcinoma: DT, drug therapy**
- \*liver cell carcinoma: TH, therapy
- \*liver cell carcinoma: RT, radiotherapy
- \*liver cell carcinoma: PC, prevention**

human

major clinical study

controlled study

randomized controlled trial

hepatitis C: ET, etiology

**hepatitis C: PC, prevention**

hepatitis B: ET, etiology

**hepatitis B: PC, prevention**

liver cirrhosis: ET, etiology

liver transplantation

**artificial embolism**

cryotherapy

clinical trial

multidrug resistance

fast proton radiation

hyperthermic therapy

pancreatitis: CO, complication

peptic ulcer: CO, complication

necrosis: CO, complication

liver failure: CO, complication

liver abscess: CO, complication

**arteritis: CO, complication**

gallbladder disease: CO, complication

immunotherapy

herbal medicine

article

## Drug Descriptors:

**\*epirubicin: DT, drug therapy**

\*epirubicin: CT, clinical trial

**\*mitoxantrone: DT, drug therapy**

\*mitoxantrone: CT, clinical trial

**\*platinum complex: DT, drug therapy**

\*platinum complex: CT, clinical trial

**\*amsacrine: DT, drug therapy**

\*amsacrine: CT, clinical trial

**\*fludarabine: DT, drug therapy**

\*fludarabine: CT, clinical trial

**\*vinblastine: DT, drug therapy**

\*vinblastine: CT, clinical trial

**\*zidovudine: DT, drug therapy**

\*zidovudine: CT, clinical trial

**\*doxifluridine: DT, drug therapy**

\*doxifluridine: CT, clinical trial

**\*fluorouracil: DT, drug therapy**

\*fluorouracil: IA, intraarterial drug administration

\*fluorouracil: CT, clinical trial

**\*anthracycline: DT, drug therapy**

\*anthracycline: IA, intraarterial drug administration

\*anthracycline: CT, clinical trial

**\*floxuridine: DT, drug therapy**

\*floxuridine: IA, intraarterial drug administration

\*floxuridine: CB, drug combination

\*floxuridine: CT, clinical trial

**\*folinic acid: DT, drug therapy**

\*folinic acid: IA, intraarterial drug administration

\*folinic acid: CB, drug combination  
\*folinic acid: CT, clinical trial  
  **\*cisplatin: DT, drug therapy**  
\*cisplatin: IA, intraarterial drug administration  
\*cisplatin: CB, drug combination  
\*cisplatin: CT, clinical trial  
  **\*doxorubicin: DT, drug therapy**  
\*doxorubicin: IA, intraarterial drug administration  
\*doxorubicin: CB, drug combination  
\*doxorubicin: CT, clinical trial  
  **\*mitomycin: DT, drug therapy**  
\*mitomycin: IA, intraarterial drug administration  
\*mitomycin: CT, clinical trial  
\*mitoxantrone: IA, intraarterial drug administration  
\*gelatin sponge  
  **\*alcohol: DT, drug therapy**  
  **\*tamoxifen: DT, drug therapy**  
\*tamoxifen: CT, clinical trial  
  **\*flutamide: DT, drug therapy**  
\*flutamide: CT, clinical trial  
  **\*ketoconazole: DT, drug therapy**  
\*ketoconazole: CT, clinical trial  
  **\*buserelin: DT, drug therapy**  
\*buserelin: CT, clinical trial  
  **\*retinoic acid: DT, drug therapy**  
\*retinoic acid: CT, clinical trial  
  **\*octreotide: DT, drug therapy**  
\*octreotide: CT, clinical trial  
  **\*inchinko to: DT, drug therapy**  
  **\*flavonoid quercetin: DT, drug therapy**  
  **\*hepatitis B vaccine: DT, drug therapy**

CAS REGISTRY NO.: (epirubicin) 56390-09-1, 56420-45-2; (mitoxantrone) 65271-80-9, 70476-82-3; (amsacrine) 51264-14-3, 54301-15-4; (fludarabine) 21679-14-1; (vinblastine) 865-21-4; (zidovudine) 30516-87-1; (doxifluridine) 3094-09-5; (fluorouracil) 51-21-8; (floxuridine) 50-91-9; (folinic acid) 58-05-9, 68538-85-2; (cisplatin) 15663-27-1, 26035-31-4, 96081-74-2; (doxorubicin) 23214-92-8, 25316-40-9; (mitomycin) 1404-00-8; (mitoxantrone) 65271-80-9, 70476-82-3; (alcohol) 64-17-5; (tamoxifen) 10540-29-1; (flutamide) 13311-84-7; (ketoconazole) 65277-42-1; (buserelin) 57982-77-1; (retinoic acid) 302-79-4; (octreotide) 83150-76-9

L124 ANSWER 26 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2000382783 EMBASE

TITLE: The oestrogen receptor and its selective modulators in gynaecological and breast cancer.

AUTHOR: Vergote I.; Neven P.; Van Dam P.; Serreyn R.; De Prins F.; De Sutter P.; Albertyn G.

CORPORATE SOURCE: I. Vergote, Gynaecological Oncology, University Hospitals Leuven, Herestraat 49, B-3000 Leuven, Belgium.  
ignace.vergote@uz.kuleuven.ac.be

SOURCE: European Journal of Cancer, (2000) 36/SUPPL. 4 (S1-S9).  
Refs: 70

ISSN: 0959-8049 CODEN: EJCAEL

PUBLISHER IDENT.: S 0959-8049(00)00203-3

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 010 Obstetrics and Gynecology  
016 Cancer  
030 Pharmacology  
037 Drug Literature Index



038      Adverse Reactions Titles  
LANGUAGE:      English

CONTROLLED TERM:      Medical Descriptors:  
                    \***gynecologic cancer: DT, drug therapy**  
                    \***breast carcinoma: DT, drug therapy**  
                    \*drug mechanism  
                    hormonal therapy  
                    protein domain  
                    menopause  
                    drug receptor binding  
                    uterus carcinoma  
                    hormone responsive element  
                    cancer survival  
                    amino terminal sequence  
                    endometrium carcinoma: SI, side effect  
                    vagina bleeding: SI, side effect  
                    **thromboembolism: SI, side effect**  
                    human  
                    major clinical study  
                    human tissue  
                    review  
                    priority journal  
                    Drug Descriptors:  
                    \*estrogen receptor  
                    \***selective estrogen receptor modulator: DT, drug**  
                    **therapy**  
                    \***selective estrogen receptor modulator: PD,**  
                    **pharmacology**  
                    tamoxifen: AE, adverse drug reaction  
                    tamoxifen: CM, drug comparison  
                    **tamoxifen: PD, pharmacology**  
                    tamoxifen: PO, oral drug administration  
                    estrogen receptor alpha  
                    estrogen receptor beta  
                    transcription factor  
                    toremifene: AE, adverse drug reaction  
                    toremifene: CM, drug comparison  
                    **toremifene: PD, pharmacology**  
                    **idoxifene: PD, pharmacology**  
                    benzothiophene derivative  
                    naphthalene derivative  
                    benzopyran derivative  
                    nafoxidine: AE, adverse drug reaction  
                    trioxifene: AE, adverse drug reaction  
                    zindoxifene: AE, adverse drug reaction  
                    arxoxifene: CM, drug comparison  
                    **arxoxifene: PD, pharmacology**  
                    raloxifene: CM, drug comparison  
                    **raloxifene: PD, pharmacology**  
                    **7alpha [9 (4,4,5,5,5 pentafluoropentylsulfinyl)nonyl]e**  
                    **stra 1,3,5(10) triene 3,17beta diol: PD, pharmacology**  
                    anastrozole: AE, adverse drug reaction  
                    anastrozole: CM, drug comparison  
                    **anastrozole: PD, pharmacology**  
                    **11 [4 [[5 [(4,4,5,5,5 pentafluoropentyl)sulfonyl]penty**  
                    **l]oxy]phenyl]estradiol: PD, pharmacology**  
                    medroxyprogesterone acetate: CM, drug comparison  
                    **medroxyprogesterone acetate: PD, pharmacology**  
                    medroxyprogesterone acetate: PO, oral drug administration  
                    isoflavone  
                    phytoestrogen  
                    **tangeretin: DV, drug development**

aromatase inhibitor  
aminogluthethimide  
letrozole: CM, drug comparison  
    **letrozole: PD, pharmacology**  
exemestane  
megestrol acetate: CM, drug comparison  
    **megestrol acetate: PD, pharmacology**  
fadrozole  
vorozole  
unindexed drug

CAS REGISTRY NO.: (tamoxifen) 10540-29-1; (toremifene) 89778-26-7;  
(idoxifene) 116057-75-1; (nafoxidine) 1845-11-0, 1847-63-8;  
(trioxifene) 63619-84-1; (zindoxifene) 86111-26-4;  
(arzoxifene) 182133-25-1, 182133-27-3; (raloxifene)  
82640-04-8, 84449-90-1; (7alpha [9 (4,4,5,5,5  
pentafluoropentylsulfinyl)nonyl]estra 1,3,5(10) triene  
3,17beta diol) 129453-61-8; (anastrozole) 120511-73-1; (11  
[4 [[5 [(4,4,5,5,5 pentafluoropentyl)sulfonyl]pentyl]oxy]ph  
enyl]estradiol) 151555-47-4; (medroxyprogesterone acetate)  
71-58-9; (isoflavone) 574-12-9; (**tangeretin**)  
**481-53-8**; (aminogluthethimide) 125-84-8; (letrozole)  
112809-51-5; (exemestane) 107868-30-4; (megestrol acetate)  
595-33-5; (fadrozole) 102676-31-3; (vorozole) 118949-22-7,  
129731-10-8  
CHEMICAL NAME: Ru 58668; Ici 182780; Ly 353381

L124 ANSWER 27 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2000055580 EMBASE

TITLE: Flavonoids - A review of biological activities.

AUTHOR: Jaggi R.K.; Kapoor S.

CORPORATE SOURCE: R.K. Jaggi, Univ. Inst. of Pharmaceutical Sci., Panjab  
University, Chandigarh 160014, India

SOURCE: Indian Drugs, (1999) 36/11 (668-678).

Refs: 153

ISSN: 0019-462X CODEN: INDRBA

COUNTRY: India

DOCUMENT TYPE: Journal; General Review

FILE SEGMENT: 037 Drug Literature Index  
030 Pharmacology  
038 Adverse Reactions Titles

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

Flavonoids - a group of phenolic derivatives with diverse chemical structure, are widely distributed in plants. Flavonoids have a variety of biological activities and recently this group of natural products has gained much interest as bioactive compounds. This review gives an account of various biological activities of flavonoids.

CONTROLLED TERM: Medical Descriptors:

\*drug activity

human

nonhuman

plant

**vascular disease: DT, drug therapy**

**vascular disease: PC, prevention**

antineoplastic activity

antiinflammatory activity

antiviral activity

cosmetic industry

liver protection

drug inhibition

**ulcer: DT, drug therapy**

ulcer: SI, side effect  
    cancer: DT, drug therapy  
    inflammatory disease: DT, drug therapy  
    liver disease: DT, drug therapy  
antimicrobial activity  
    infection: DT, drug therapy  
antioxidant activity  
cardiotoxicity  
review  
Drug Descriptors:  
    \*flavonoid: DT, drug therapy  
    \*flavonoid: PD, pharmacology  
\*flavonoid: PO, oral drug administration  
\*flavonoid: IV, intravenous drug administration  
    flavone: DT, drug therapy  
    hesperidin: DT, drug therapy  
    hesperidin: PD, pharmacology  
    quercitrin: DT, drug therapy  
    quercitrin: PD, pharmacology  
    progesterone: DT, drug therapy  
    progesterone: PD, pharmacology  
    naringenin: DT, drug therapy  
    naringenin: PD, pharmacology  
    kaempferol: DT, drug therapy  
    kaempferol: PD, pharmacology  
    silymarin: DT, drug therapy  
    silymarin: PD, pharmacology  
    gossypetin: DT, drug therapy  
    gossypetin: PD, pharmacology  
acetylsalicylic acid: AE, adverse drug reaction  
    ascorbic acid: PD, pharmacology  
    hinokiflavone: DT, drug therapy  
    hinokiflavone: PD, pharmacology  
    monoxerutin: DT, drug therapy  
    monoxerutin: PD, pharmacology  
    troxerutin: DT, drug therapy  
    troxerutin: PD, pharmacology  
    quercetin 3 methyl ether: DT, drug therapy  
    quercetin 3 methyl ether: PD, pharmacology  
    fisetin: DT, drug therapy  
    fisetin: PD, pharmacology  
    taxifolin: DT, drug therapy  
    taxifolin: PD, pharmacology  
    tangeretin: DT, drug therapy  
    tangeretin: PD, pharmacology  
    luteolin: DT, drug therapy  
    luteolin: PD, pharmacology  
    hesperetin: DT, drug therapy  
    hesperetin: PD, pharmacology  
    apigenin: DT, drug therapy  
    apigenin: PD, pharmacology  
    acacetin: DT, drug therapy  
    acacetin: PD, pharmacology  
acacetin: PO, oral drug administration  
    rutoside derivative: DT, drug therapy  
    rutoside derivative: PD, pharmacology  
    esculetin: DT, drug therapy  
    esculetin: PD, pharmacology  
    s adenosylmethionine: DT, drug therapy  
    s adenosylmethionine: PD, pharmacology  
doxorubicin: TO, drug toxicity  
    apiin: DT, drug therapy  
    apiin: PD, pharmacology

papaverine: DT, drug therapy  
papaverine: PD, pharmacology  
genistein: DT, drug therapy  
genistein: PD, pharmacology

unindexed drug

chromocor

flavo ce

CAS REGISTRY NO.: (flavone) 525-82-6; (hesperidin) 520-26-3; (quercitrin) 522-12-3; (progesterone) 57-83-0; (naringenin) 480-41-1, 67604-48-2; (kaempferol) 520-18-3; (silymarin) 65666-07-1; (gossypetin) 489-35-0; (acetylsalicylic acid) 493-53-8, 50-78-2, 53663-74-4, 53664-49-6, 63781-77-1; (ascorbic acid) 134-03-2, 15421-15-5, 50-81-7; (hinokiflavone) 19202-36-9; (monoxerutin) 55965-63-4; (troxerutin) 7085-55-4, 84932-19-4; (quercetin 3 methyl ether) 1486-70-0; (fisetin) 528-48-3; (taxifolin) 480-18-2; (**tangeretin**) **481-53-8**; (luteolin) 491-70-3; (hesperetin) 520-33-2; (apigenin) 520-36-5; (acacetin) 480-44-4; (esculetin) 305-01-1; (s adenosylmethionine) 29908-03-0, 485-80-3; (doxorubicin) 23214-92-8, 25316-40-9; (apiin) 26544-34-3; (papaverine) 58-74-2, 61-25-6; (genistein) 446-72-0

CHEMICAL NAME: Chromocor; Flavo ce

L124 ANSWER 28 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 1999042736 EMBASE

TITLE: Influence of the antioxidant quercetin in vivo on the level of nitric oxide determined by electron paramagnetic resonance in rat brain during global ischemia and reperfusion.

AUTHOR: Shutenko Z.; Henry Y.; Pinard E.; Seylaz J.; Potier P.; Berthet F.; Girard P.; Sercombe R.

CORPORATE SOURCE: Dr. R. Sercombe, UPR 646 CNRS, Universite Paris VII, 10 Avenue de Verdun, 75010 Paris, France.  
sercombe@ext.jussieu.fr

SOURCE: Biochemical Pharmacology, (1999) 57/2 (199-208).  
Refs: 66

ISSN: 0006-2952 CODEN: BCPA6

PUBLISHER IDENT.: S 0006-2952(98)00296-2

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry  
030 Pharmacology  
037 Drug Literature Index  
008 Neurology and Neurosurgery

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

We characterized the changes in nitric oxide (NO) levels in the brain during global forebrain ischemia and reperfusion and tested the ability of the natural flavonoid, quercetin, and a synthetic flavonoid, FB277, to increase the amount of available NO by elimination of the superoxide radicals produced during reperfusion. In Sprague-Dawley rats, we used a four-vessel occlusion model of forebrain ischemia (15 min) and reperfusion (30 min). Brain NO was measured on samples of cerebral cortex and cerebellum ex vivo by electron paramagnetic resonance (EPR) spectroscopy. The spin trap used was diethyldithiocarbamate sodium salt (DETC) associated with ferrous citrate. The complex Fe(DETC)2NO was detected at 77 K as a triplet signal at  $g = 2.035$ . Groups of animals were treated with quercetin or FB277 (3-morpholinomethyl-3',4',5,7-tetramethoxyflavone) or polyethylene glycol-conjugated superoxide dismutase (PEG-SOD). In control (intact anesthetized animals), the signal was about 3 times greater in the cortex than in the cerebellum. During ischemia, the signal rose to 110% in cortex (NS) and 283% in cerebellum ( $P < 0.05$ ). In

reperfusion, it fell again to 91% of control in cerebellum (NS) and 35% in cortex ( $P < 0.05$ ). Treatment by quercetin (5 mg/kg i.v.) of intact and ischemia-reperfusion groups did not significantly change the signal amplitude in the cerebellum, but did double it in the cortex (to 76% of control) for the ischemia-reperfusion group ( $P < 0.05$ ). In contrast, FB277 (3.75 mg/kg i.v.) did not increase the signal in the cortex during ischemia-reperfusion, but did do so in the cerebellum (to 152% of control,  $P < 0.05$ ). The results obtained for PEG-SOD (10,000 U/kg i.v.) were similar to those for FB277. In separate in vitro measurements, we found that quercetin but not FB277 efficiently scavenged superoxide. We hypothesize that quercetin but not FB277 scavenged superoxide anions released in the cortex during reperfusion, thus diminishing the amount of NO removed by the formation of peroxynitrite. The lack of effect of PEG-SOD may be related to the need for chronic treatment to obtain protection.

Copyright (C) 1999 Elsevier Science Inc.

CONTROLLED TERM: Medical Descriptors:  
\*electron spin resonance  
\*brain ischemia: DT, drug therapy  
\*reperfusion  
nonhuman  
male  
rat  
animal experiment  
animal model  
controlled study  
intravenous drug administration  
intraperitoneal drug administration  
article  
priority journal  
Drug Descriptors:  
\*nitric oxide: EC, endogenous compound  
\*quercetin: PD, pharmacology  
\*quercetin: DT, drug therapy  
\*quercetin: CM, drug comparison  
\*flavonoid: PD, pharmacology  
\*flavonoid: DT, drug therapy  
\*flavonoid: DV, drug development  
\*flavonoid: CM, drug comparison  
\*scavenger: PD, pharmacology  
\*superoxide dismutase macrogol: PD, pharmacology  
\*superoxide dismutase macrogol: DT, drug therapy  
\*superoxide dismutase macrogol: CM, drug comparison  
antioxidant: PD, pharmacology  
antioxidant: DT, drug therapy  
antioxidant: CM, drug comparison  
superoxide: EC, endogenous compound  
CAS REGISTRY NO.: (nitric oxide) 10102-43-9; (quercetin) 117-39-5;  
(superoxide) 11062-77-4  
COMPANY NAME: Sigma

L124 ANSWER 29 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 97267059 EMBASE  
DOCUMENT NUMBER: 1997267059  
TITLE: Trypanocidal flavonoids from *Trixis vauthieri*.  
AUTHOR: Ribeiro A.; Pilo-Veloso D.; Romanha A.J.; Zani C.L.  
CORPORATE SOURCE: C.L. Zani, Departamento de Quimica-ICEx-UFMG, CEP  
31270-901, Av. Antonio Carlos 6627, CEP 31270-901 Belo  
Horizonte, MG, Brazil. zani@dcc001.ciet.fiocruz.br  
SOURCE: Journal of Natural Products, (1997) 60/8 (836-838).  
Refs: 29  
ISSN: 0163-3864 CODEN: JNPRDF  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 004 Microbiology  
030 Pharmacology  
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ABSTRACT:

The crude extract of *Trixis vauthieri* (Asteraceae) was active against the trypomastigote forms of *Trypanosoma cruzi*, the protozoan that causes Chagas' disease. Bioassay-guided fractionation of this extract afforded the trypanocidal flavonoids 5,4'-dihydroxy-7-methoxyflavanone (1) and 5,4'-dihydroxy-3,6,7-trimethoxyflavone (2) besides the inactive flavonoids 3,5,4'-trihydroxy-7-methoxyflavanone (3) and 5,4'-dihydroxy-3,6,7,8-tetramethoxyflavone (4). The trypanocidal activity of 1 and 2 and the presence of compounds 2 and 4 in *Trixis vauthieri* are reported here for the first time.

CONTROLLED TERM: Medical Descriptors:  
\*chagas disease: DT, drug therapy  
\*chagas disease: ET, etiology  
\*trypanosoma cruzi  
animal experiment  
animal model  
article  
blood transfusion  
controlled study  
disease carrier  
drug screening  
hemiptera  
mouse  
nonhuman  
plant leaf  
trypomastigote  
Drug Descriptors:  
\*5,4' dihydroxy 3,6,7 trimethoxyflavone: PD, pharmacology  
\*5,4' dihydroxy 3,6,7 trimethoxyflavone: DT, drug therapy  
\*5,4' dihydroxy 3,6,7 trimethoxyflavone: DV, drug development  
\*5,4' dihydroxy 7 methoxyflavanone: DV, drug development  
\*5,4' dihydroxy 7 methoxyflavanone: PD, pharmacology  
\*5,4' dihydroxy 7 methoxyflavanone: DT, drug therapy  
\*antitrypanosomal agent: DV, drug development  
\*antitrypanosomal agent: DT, drug therapy  
\*antitrypanosomal agent: PD, pharmacology  
\*flavonoid: PD, pharmacology  
\*flavonoid: DT, drug therapy  
\*flavonoid: DV, drug development  
\*plant extract: PD, pharmacology  
\*plant extract: DT, drug therapy  
\*plant extract: DV, drug development  
benznidazole: DT, drug therapy  
crystal violet  
nifurtimox: DT, drug therapy  
unclassified drug  
CAS REGISTRY NO.: (benznidazole) 22994-85-0; (crystal violet) 467-63-0, 548-62-9; (nifurtimox) 23256-30-6

L124 ANSWER 30 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 93273634 EMBASE

DOCUMENT NUMBER: 1993273634

TITLE: Endothelium-dependent vasorelaxing activity of wine and

other grape products.  
AUTHOR: Fitzpatrick D.F.; Hirschfield S.L.; Coffey R.G.  
CORPORATE SOURCE: Dept. of Pharmacology/Therapeutics, Univ. of South Florida  
Coll. of Med., MDC Box 9, 12901 Bruce B. Downs Blvd., Tampa,  
FL 33612-4799, United States  
SOURCE: American Journal of Physiology - Heart and Circulatory  
Physiology, (1993) 265/2 34-2 (H774-H778).  
ISSN: 0002-9513 CODEN: AJPPDI  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery  
030 Pharmacology  
037 Drug Literature Index  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ABSTRACT:

Current interest in the presumed benefits of wine in protecting against coronary heart disease prompted us to investigate possible effects of various grape products on vascular function in vitro. Certain wines, grape juices, and grape skin extracts relaxed precontracted smooth muscle of intact rat aortic rings but had no effect on aortas in which the endothelium had been removed. \*\*\*Quercetin\*\*\* and tannic acid, compounds known to be present in grape skins, also produced endothelium-dependent relaxation; two other grape skin compounds, resveratrol and malvidin, did not relax the rings. Phenylephrine-induced contractions were attenuated by prior exposure of aortic rings to grape skin extracts. The extracts also increased guanosine 3',5'-cyclic monophosphate (cGMP) levels in intact vascular tissue, and both relaxation and the increase in cGMP were reversed by N(G)-monomethyl-L-arginine and N(G)-nitro-L-arginine, competitive inhibitors of the synthesis of the endothelium-derived relaxing factor, nitric oxide (NO). The vasorelaxation induced by grape products therefore appears to be mediated by the NO-cGMP pathway. If such responses occur in vivo, they could conceivably help to maintain a patent coronary artery and thereby possibly contribute to a reduced incidence of coronary heart disease.

CONTROLLED TERM: Medical Descriptors:  
\*ischemic heart disease: PC, prevention  
\*vascular endothelium  
\*vasodilatation  
animal tissue  
article  
concentration response  
controlled study  
fruit  
male  
nonhuman  
priority journal  
rat  
smooth muscle  
wine  
Drug Descriptors:  
\*plant extract  
arginine derivative  
cyclic gmp: EC, endogenous compound  
nitric oxide  
phenylephrine  
quercetin  
tannin  
CAS REGISTRY NO.: (cyclic gmp) 7665-99-8; (nitric oxide) 10102-43-9;  
(phenylephrine) 532-38-7, 59-42-7, 61-76-7; (quercetin)  
117-39-5; (tannin) 1401-55-4

L124 ANSWER 31 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.

Searched by Barb O'Bryen, STIC 308-4291

ACCESSION NUMBER: 94094940 EMBASE  
DOCUMENT NUMBER: 1994094940  
TITLE: Evaluation of some flavonoids as potential bradykinin antagonists.  
AUTHOR: Hye Sook Yun-Choi; Sung Hyun Chung; Young Joo Kim  
CORPORATE SOURCE: Natural Products Research Institute, Seoul National University, Seoul 110-460, Korea, Republic of  
SOURCE: Archives of Pharmacal Research, (1993) 16/4 (283-288).  
ISSN: 0253-6269 CODEN: APHRDQ  
COUNTRY: Korea, Republic of  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 030 Pharmacology  
037 Drug Literature Index  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ABSTRACT:

Fourteen flavonoids were evaluated for their effects as potential bradykinin (BK) antagonists. The compounds were evaluated in several in vitro and in vivo (oral administration) systems; inhibition of BK induced contractions in isolated rat ileum and uterus, antagonistic effects of BK induced plasma extravasation, reduction of acetic acid induced writhing nociception and protection from endotoxic shock. Skullcapflavone II (3), baicalein (5), 5-\*\*\*methoxyflavone\*\*\* (11), 6-\*\*\*methoxyflavone\*\*\* (12) and 2'-\*\*\*methoxyflavone\*\*\* (14) showed effects in all the tests although the order of potency were somewhat varied.

CONTROLLED TERM: Medical Descriptors:  
\*analgesia  
\*extravasation  
\*shock: DT, drug therapy  
\*shock: PC, prevention  
\*smooth muscle contraction  
animal experiment  
animal model  
animal tissue  
article  
drug antagonism  
ileum  
male  
mouse  
nonhuman  
oral drug administration  
rat  
uterus  
Drug Descriptors:  
\*baicalein: PD, pharmacology  
\*baicalein: CM, drug comparison  
\*baicalein: DT, drug therapy  
\*baicalein: IT, drug interaction  
\*baicalein: CB, drug combination  
\*flavonoid: DT, drug therapy  
\*flavonoid: CB, drug combination  
\*flavonoid: CM, drug comparison  
\*flavonoid: PD, pharmacology  
\*flavonoid: IT, drug interaction  
2' methoxyflavone: PD, pharmacology  
2' methoxyflavone: CB, drug combination  
2' methoxyflavone: CM, drug comparison  
2' methoxyflavone: IT, drug interaction  
2' methoxyflavone: DT, drug therapy  
2',5,6' trihydroxy 7,8 dimethoxyflavone: PD, pharmacology  
2',5,6' trihydroxy 7,8 dimethoxyflavone: DT, drug



## therapy

2',5,6' trihydroxy 7,8 dimethoxyflavone: IT, drug interaction

2',5,6' trihydroxy 7,8 dimethoxyflavone: CM, drug comparison

2',5,6' trihydroxy 7,8 dimethoxyflavone: CB, drug combination

3 hydroxyflavone: CB, drug combination

3 hydroxyflavone: CM, drug comparison

3 hydroxyflavone: PD, pharmacology

3 hydroxyflavone: DT, drug therapy

3 hydroxyflavone: IT, drug interaction

5 methoxyflavone: CB, drug combination

5 methoxyflavone: CM, drug comparison

5 methoxyflavone: DT, drug therapy

5 methoxyflavone: PD, pharmacology

5 methoxyflavone: IT, drug interaction

6 methoxyflavone: PD, pharmacology

6 methoxyflavone: DT, drug therapy

6 methoxyflavone: IT, drug interaction

6 methoxyflavone: CB, drug combination

6 methoxyflavone: CM, drug comparison

apigenin: CB, drug combination

apigenin: PD, pharmacology

apigenin: IT, drug interaction

apigenin: CM, drug comparison

apigenin: DT, drug therapy

bradykinin: IT, drug interaction

bradykinin: TO, drug toxicity

bradykinin: PD, pharmacology

bradykinin: CB, drug combination

chrysin dimethyl ether: CB, drug combination

chrysin dimethyl ether: DT, drug therapy

chrysin dimethyl ether: PD, pharmacology

chrysin dimethyl ether: IT, drug interaction

chrysin dimethyl ether: CM, drug comparison

datiscetin: PD, pharmacology

datiscetin: DT, drug therapy

datiscetin: IT, drug interaction

datiscetin: CM, drug comparison

datiscetin: CB, drug combination

kaempferol: PD, pharmacology

kaempferol: DT, drug therapy

kaempferol: IT, drug interaction

kaempferol: CM, drug comparison

kaempferol: CB, drug combination

oroxylin a: PD, pharmacology

oroxylin a: DT, drug therapy

oroxylin a: IT, drug interaction

oroxylin a: CM, drug comparison

oroxylin a: CB, drug combination

primuletin: PD, pharmacology

primuletin: DT, drug therapy

primuletin: IT, drug interaction

primuletin: CM, drug comparison

primuletin: CB, drug combination

skullcapflavone ii: PD, pharmacology

skullcapflavone ii: DT, drug therapy

skullcapflavone ii: IT, drug interaction

skullcapflavone ii: CM, drug comparison

skullcapflavone ii: CB, drug combination

wogonin: IT, drug interaction

wogonin: DT, drug therapy

wogonin: PD, pharmacology  
wogonin: CM, drug comparison  
wogonin: CB, drug combination  
unclassified drug

CAS REGISTRY NO.: (baicalein) 491-67-8; (apigenin) 520-36-5; (bradykinin) 58-82-2, 5979-11-3; (kaempferol) 520-18-3; (oroxylins) 480-11-5; (skullcapflavone ii) 55084-08-7; (wogonin) 632-85-9

COMPANY NAME: Sigma (United States); Roth (Germany)

L124 ANSWER 32 OF 39 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.  
ACCESSION NUMBER: 89057987 EMBASE  
DOCUMENT NUMBER: 1989057987  
TITLE: A flavonoid inhibitor of 5-lipoxygenase inhibits leukotriene production following ischemia in gerbil brain.  
AUTHOR: Ban M.; Tonai T.; Kohno T.; Matsumoto K.; Horie T.; Yamamoto S.; Moskowitz M.A.; Levine L.  
CORPORATE SOURCE: Department of Neurological Surgery, School of Medicine, Tokushima University, Tokushima 770, Japan  
SOURCE: Stroke, (1989) 20/2 (248-252).  
ISSN: 0039-2499 CODEN: SJCCA7  
COUNTRY: United States  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 008 Neurology and Neurosurgery  
037 Drug Literature Index  
018 Cardiovascular Diseases and Cardiovascular Surgery  
026 Immunology, Serology and Transplantation

LANGUAGE: English  
SUMMARY LANGUAGE: English  
ABSTRACT:  
Leukotrienes C4 and D4 are arachidonic acid metabolites that constrict blood vessels and enhance vascular permeability; their biosynthesis is initiated by the reaction of arachidonic acid with 5-lipoxygenase enzyme. After bilateral carotid artery occlusion for 15 minutes and reperfusion of the gerbil brain for 15 minutes, we determined the brain tissue concentrations of leukotrienes C4 and D4 by radioimmunoassay; they had increased from a baseline concentration of <1 to a mean  $\pm$  SEM concentration of 12.8  $\pm$  3.9 pmol/g brain. We also studied the effect of a flavonoid 5-lipoxygenase inhibitor on leukotriene production in the reperfused gerbil brain. A water-soluble flavonoid (5-hexyloxy-3',4'-dihydroxy-6,7-dimethoxyflavone 4'-disodium phosphate) was administered intravenously at a dose of 200 mg/kg body wt; 15 minutes later, both carotid arteries were occluded. The enhanced production of leukotrienes C4 and D4 in the reperfused brain was reduced by approximately 80% (from a mean  $\pm$  SEM of 12.8  $\pm$  3.9 to 2.2  $\pm$  1.3 pmol/g brain) in the presence of the 5-lipoxygenase inhibitor. The flavonoid did not affect the production of prostaglandin D2, the concentration of which also increased in the reperfused ischemic brain.

CONTROLLED TERM: Medical Descriptors:  
\*brain ischemia  
carotid artery obstruction  
gerbil  
radioimmunoassay  
animal experiment  
nonhuman  
intravenous drug administration  
priority journal  
Drug Descriptors:  
\*arachidonate 5 lipoxygenase  
\*leukotriene  
5 hexyloxy 3',4' dihydroxy 6,7 dimethoxyflavone 4'  
disodium phosphate: PD, pharmacology  
unclassified drug

CAS REGISTRY NO.: (arachidonate 5 lipoxygenase) 80619-02-9

L124 ANSWER 33 OF 39 WPIDS (C) 2002 THOMSON DERWENT  
ACCESSION NUMBER: 2001-476022 [51] WPIDS  
DOC. NO. CPI: C2001-142785  
TITLE: Production of enriched flavonoid aglycone extract for  
treating and preventing degenerative diseases,  
e.g. heart disease, comprises  
enzymatically converting flavonoid glycoside into  
flavonoid aglycone, and adjusting acidity.  
DERWENT CLASS: B02 D16  
INVENTOR(S): BURONG, W G; WALLACE, R G  
PATENT ASSIGNEE(S): (BIOR-N) BIOREX HEALTH LTD  
COUNTRY COUNT: 94  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001051482	A1	20010719	(200151)*	EN	46
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001026531	A	20010724	(200166)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001051482	A1	WO 2001-AU16	20010111
AU 2001026531	A	AU 2001-26531	20010111

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001026531	A Based on	WO 200151482

PRIORITY APPLN. INFO: US 2000-175443P 20000111; AU 2000-5043  
20000111

AB WO 200151482 A UPAB: 20010910

NOVELTY - Producing an enriched flavonoid aglycone extract from starting material containing flavonoid glycoside or its conjugate, comprises enzymatically converting the flavonoid glycoside into flavonoid aglycone, and adjusting the pH to render the flavonoid aglycone soluble, removing the insoluble fraction, and rendering the soluble flavonoid aglycone insoluble.

DETAILED DESCRIPTION - Production of an enriched flavonoid aglycone extract from starting material containing flavonoid glycoside or its conjugate, comprises enzymatically converting the flavonoid glycoside into flavonoid aglycone. The pH is adjusted to render the flavonoid aglycone soluble, removing the insoluble fraction. The pH is adjusted to render the soluble flavonoid aglycone relatively insoluble and forming the flavonoid glycoside extract.

An INDEPENDENT CLAIM is also included for the enriched flavonoid aglycone extract produced by the new method.

ACTIVITY - Antimicrobial; antioxidant; cardiant; neuroprotective; nootropic; cytostatic. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The method is used for the production of enriched flavonoid aglycone (claimed) extract used as therapeutic, anti-microbial, and antioxidant. Flavonoids are used for treating and preventing a range of medical disorders and **diseases** including degenerative **diseases**, e.g. **heart disease**, Alzheimer's **disease**, dementia, and cancer.

ADVANTAGE - The method does not involve the use of toxic reagents, does not require undue multiple extractions, does not involve extraction of the flavonoid in its glycosylated form (flavonoid glycoside), is not time consuming, and does not involve the use of significant quantities of flammable organic solvents.

Dwg.0/0

L124 ANSWER 34 OF 39 WPIDS (C) 2002 THOMSON DERWENT  
ACCESSION NUMBER: 2001-168573 [17] WPIDS  
CROSS REFERENCE: 2000-491047 [41]  
DOC. NO. CPI: C2001-050394  
TITLE: Identifying pattern of cellular responses caused by inhibition of signaling molecule, useful for identifying therapeutic selective inhibitors, particularly of protein kinases.  
DERWENT CLASS: B04 D16  
INVENTOR(S): BISHOP, A; SHOKAT, K M  
PATENT ASSIGNEE(S): (UYPR-N) UNIV PRINCETON  
COUNTRY COUNT: 95  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001007659	A2	20010201	(200117)*	EN	78
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000063620	A	20010213	(200128)		
EP 1196626	A2	20020417	(200233)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001007659	A2	WO 2000-US19912	20000721
AU 2000063620	A	AU 2000-63620	20000721
EP 1196626	A2	EP 2000-950527	20000721
		WO 2000-US19912	20000721

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000063620	A Based on	WO 200107659
EP 1196626	A2 Based on	WO 200107659

PRIORITY APPLN. INFO: US 2000-621293 20000720; US 1999-145422P  
19990723

AB WO 200107659 A UPAB: 20020524  
NOVELTY - Identifying a pattern of cellular responses attributable to selective inhibition of a particular wild-type signaling molecule (I), is

new.

DETAILED DESCRIPTION - Identifying a pattern of cellular responses attributable to selective inhibition of a particular wild-type signaling molecule (I), is new. Mutant cells (A), having a functionally silent, mutant form of (I), are exposed to a selective inhibitor (II) of the mutant (I), and the cellular responses of (A), before and after exposure, are identified. Optionally, responses are also determined for wild-type cells (A1), unexposed and/or exposed to (II). The observed responses are compared to identify a pattern of responses attributable to selective inhibition of wild-type (I), corresponding to the response pattern attributable to inhibition of mutant (I) in (A).

INDEPENDENT CLAIMS are also included for the following:

(1) pattern of cellular responses attributable to selective inhibition of wild-type (I), comprising changes in responses to selective inhibition of mutant (I) by (II); and

(2) identifying a selective inhibitor (IIa) of wild-type (I) by identifying a pattern of responses, treating wild-type cells with test compound and selecting compounds that generate a similar pattern of responses.

ACTIVITY - Cytostatic; vasotropic; **antiarteriosclerosis**, nephrotropic; antipsoriatic; nootropic; neuroprotective.

No biological data is given.

MECHANISM OF ACTION - (I) inhibitor.

USE - The method is used to establish a pattern of responses that allows identification of selective inhibitors of wild-type (I), particularly protein kinases, from their ability to create a similar response pattern. The selective inhibitors are potentially useful for treating abnormal cell growth, e.g. tumors, restenosis, **atherosclerosis**, glomerulonephritis, psoriasis and Alzheimer's disease. They can also be used to identify specific substrates and to study biochemical/phenotypic effects of kinase downregulation.

ADVANTAGE - Specific inhibitors of (I) can now be identified without having to express, purify and assay (I).  
Dwg.0/5

L124 ANSWER 35 OF 39    WPIDS (C) 2002 THOMSON DERWENT  
ACCESSION NUMBER:    2002-138755 [18]    WPIDS  
CROSS REFERENCE:    1999-263429 [22]; 2001-416769 [38]; 2001-431951 [44]  
DOC. NO. CPI:    C2002-042698  
TITLE:    Compositions useful in the treatment of  
          **cardiovascular disease** e.g.  
          **atherosclerosis** and **hypercholesterolemia**  
          comprise limonoids e.g. limonin, flavonoids e.g. naringin  
          and hesperidin and/or **tocotrienols** e.g. alpha-  
          **tocotrienol**.  
DERWENT CLASS:    B05  
INVENTOR(S):    GUTHRIE, N; KUROWSKA, E M  
PATENT ASSIGNEE(S):    (GUTH-I) GUTHRIE N; (KURO-I) KUROWSKA E M  
COUNTRY COUNT:    1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2001055627	A1	20011227	(200218)*		16

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2001055627	A1	CIP of	
		US 1997-938640	19970926
		US 2000-481724	20000112

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 2001055627	A1 CIP of	US 6251400

PRIORITY APPLN. INFO: US 2000-481724 20000112; US 1997-938640  
19970926

AB US2001055627 A UPAB: 20020319

NOVELTY - A composition (I) comprises a flavonoid selected from hesperidin, naringin, naringenin, hesperitin, **nobiletin** or **tangeretin**.

DETAILED DESCRIPTION - A composition (I) comprises a flavonoid selected from hesperidin, naringin, naringenin, hesperitin, **nobiletin** or **tangeretin**.

An INDEPENDENT CLAIM is included for a composition (II) comprising a limonoid selected from limonin and nomilin and a **tocotrienol**.

ACTIVITY - **Antiartherosclerotic**; Antilipemic.

MECHANISM OF ACTION - Liver **cholesterol** synthesis inhibitor; **low-density lipoprotein (LDL)** **cholesterol** inhibitor.

Rabbits suffering from casein induced **hypercholesterolemia** were given semi purified **cholesterol** free casein diet and either water or orange juice. The control group received water to drink and test groups were given orange juice. The different lipoprotein concentration of **cholesterol** after 3 weeks on test supplement/control was as follows (mg/g liver): total **cholesterol** = 3.1 plus or minus 0.1/3.8 plus or minus 0.2; **cholesterol** esters = 0.7 plus or minus 0.1/1.2 plus or minus 0.2; free **cholesterol** = 2.4 plus or minus 0.1/2.7 plus or minus 0.1. The test supplement reduced the LDL **cholesterol** levels compared with control. This was associated with significant decrease in liver **cholesterol** esters but not with increase in fecal excretion of **cholesterol** and bile acids. The results indicated that the changes in the LDL **cholesterol** and in liver **cholesterol** esters might be due to juice components such as limonoids and flavonoids.

USE - The compositions are useful in the treatment of **atherosclerosis**, **hypercholesterolemia** (claimed) and hyperlipidemia.

ADVANTAGE - The composition has inhibitory effects on synthesis of liver **cholesteryl** esters and/or degradation of apo-B proteins.  
Dwg.0/6

L124 ANSWER 36 OF 39 WPIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 2000-339506 [29] WPIDS

DOC. NO. CPI: C2000-102976

TITLE: Increasing plasma beneficial high density lipoprotein levels with bioflavonoids or plant extracts containing them, given as such or in foods and beverages, reduces risk of coronary disease and **atherosclerosis**.

DERWENT CLASS: B02 B03 D13

INVENTOR(S): AHN, B; BOK, S; CHOI, M; CHOI, Y; HYUN, B; JEONG, T; KIM, S; KWON, Y; LEE, C; LEE, E; LEE, S; MOON, O; MOON, S; AHN, B T; BOK, S H; CHOI, M S; CHOI, Y K; HYUN, B H; JEONG, T S; KIM, S G; KWON, Y K; LEE, C H; LEE, E S; LEE, S B; MOON, O S; MOON, S S; PARK, Y B

PATENT ASSIGNEE(S): (KOAD) KOREA ADV INST SCI & TECHNOLOGY

COUNTRY COUNT: 23

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
-----------	------	------	------	----	----

WO 2000023073	A1	20000427	(200029)*	EN	24
---------------	----	----------	-----------	----	----

RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

W: CA CN JP RU  
US 6133241 A 20001017 (200054)#  
EP 1123096 A1 20010816 (200147) EN  
R: DE FR GB IT  
CN 1327384 A 20011219 (200226)

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000023073	A1	WO 1998-KR326	19981020
US 6133241	A	US 1998-177448	19981022
EP 1123096	A1	EP 1998-951779	19981020
		WO 1998-KR326	19981020
CN 1327384	A	CN 1998-814276	19981020
		WO 1998-KR326	19981020

## FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1123096	A1 Based on	WO 200023073

PRIORITY APPLN. INFO: WO 1998-KR326 19981020; US 1998-177448  
19981022

AB WO 200023073 A UPAB: 20000617

NOVELTY - Use of a bioflavanoid (I) or plant extract containing it, for increasing plasma high density lipoprotein levels; and use, as such or in foods and beverages.

DETAILED DESCRIPTION - Use of a bioflavanoid of formula (I), or a plant extract containing it, or of neohesperidin dihydrochalcone of formula (II), for increasing plasma high density lipoprotein levels in a mammal, is new:

----- = an optional bond;

R1-R9 = H, 1-9C alkoxy (optionally substituted by hydroxy, 1-5C alkoxy, aryloxy, or phenyl, 5-9C cycloalkoxy, or 6-10C cycloalkylcarbonyloxy (all optionally substituted by 1-3 Y or amido), 2-10C or 16-18C acyloxy (optionally substituted by hydroxy, 1-5C alkoxy, aryloxy, or phenyl (optionally substituted by Y), or rutinosyl or rhamnosyl; and

Y = hydroxy, alkoxy, aryloxy, halogen, or nitro

ACTIVITY - **Hypocholesteremic** (for HDL **cholesterol**); cardiovascular. Other activities, reported in prior art, are: antioxidant; anticancer; antiviral; hypotensive.

USE - (I) and (II), and extracts containing them are of value in prevention of **cardiovascular disorders** linked to low HDL/LDL ratios, notably **atherosclerosis**.

ADVANTAGE - The bioflavonoids are from natural, rather than synthetic, materials and are non-toxic, even at a level of 1 g/kg.  
Dwg.0/0

L124 ANSWER 37 OF 39 WPIDS (C) 2002 THOMSON DERWENT  
ACCESSION NUMBER: 2000-295555 [26] WPIDS  
DOC. NO. CPI: C2000-089493  
TITLE: Medical agent for inhibiting production of matrix metalloprotease or its precursor, - contains polyalkoxyflavonoid compound, such as **nobiletin** or **tangeretin**.  
DERWENT CLASS: B02  
PATENT ASSIGNEE(S): (NORQ) NORINSUISANSHO KAJU SHIKENBACHO; (NORQ) NORINSUISANSHO KAJU SHIKENJOCHO  
COUNTRY COUNT: 1  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 3010210	B1	20000221	(200026)*		11
JP 2000080035	A	20000321	(200026)		12

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 3010210	B1	JP 1998-248145	19980902
JP 2000080035	A	JP 1998-248145	19980902

PRIORITY APPLN. INFO: JP 1998-248145 19980902

AB JP 3010210 B UPAB: 20000606

NOVELTY - A medical agent for inhibiting the production of the matrix metalloprotease or its precursor, contains a polyalkoxyflavonoid. DETAILED DESCRIPTION - A medical agent for inhibiting the production of the matrix metalloprotease or its precursor, contains a polyalkoxyflavonoid of formula (I) R1 = hydrogen or 1-6C alkyl; R2-4 = hydrogen or 1-6C alkoxy; R5 = 1-6C alkyl.

USE - Used in the prevention and/or treatment of matrix metalloprotease-related illnesses, such as chronic rheumatism, osteoarthritis, cancer, **arteriosclerosis**, aneurysm, cirrhosis, ulcers, osteoporosis, pulmonary fibrosis, glomerulonephritis and periodontal inflammation.

ADVANTAGE - Production of matrix metalloprotease can be inhibited.  
Dwg.0/8

L124 ANSWER 38 OF 39 WPIDS (C) 2002 THOMSON DERWENT

ACCESSION NUMBER: 1999-526388 [44] WPIDS

CROSS REFERENCE: 1999-418245 [35]; 1999-619630 [53]

DOC. NO. CPI: C1999-154680

TITLE: Administering micronutrients and acetylsalicylic acid to prevent nutritional deficiencies and reduce coronary **heart disease**.

DERWENT CLASS: B05

INVENTOR(S): CHRISTAKIS, G; RILEY, P A

PATENT ASSIGNEE(S): (MEDI-N) MEDICAL DOCTORS RES INST INC

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 5948443	A	19990907	(199944)*		17

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5948443	A	Provisional	US 1996-12158P 19960223
			US 1997-804494 19970221

PRIORITY APPLN. INFO: US 1996-12158P 19960223; US 1997-804494 19970221

AB US 5948443 A UPAB: 19991221

NOVELTY - Modular system of multivitamin and mineral supplementation is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a new method to provide micronutrient and acetylsalicylic acid supplementation to treat nutritional deficiencies and to reduce coronary **heart**



**disease** in humans comprising the daily administration of a multivitamin/mineral formulation (A) and acetylsalicylic acid.

(A) comprises: Vitamin B1 (0.7-15 mg), vitamin B2 (0.7-15 mg), vitamin B6 (2-100 mg), niacin (6-100 mg), folate (50-800 micro g), pantothenic acid (4-50 mg), vitamin B12 (0.5-40 micro g), biotin (5-300 micro g), calcium (100-1500 mg), magnesium (25-500 mg), iron (1-20 mg), zinc (5-30 mg), manganese (1-10 mg), selenium (10-200 micro g), chromium (10-300 micro g), copper (0-4 mg), Coenzyme Q10 (5-300 mg), vitamin A (200-15000 IU), beta carotene (500-15000 IU), alpha -carotene (50-2000 micro g), lycopene (50-10000 micro g), lutein (50-5000 micro g), zeaxanthin (5-500 micro g), vitamin C (20-1000 mg), vitamin D (0-400 IU), vitamin E (5-2000 mg), grape seed extract (0-300 mg), green tea extract (0-500 mg), crataegus (0-500 mg), oxyacantha extract L-carnitine (0-700 mg), alpha -lipoic acid (0-750 mg), taurine (15-1000 mg), **quercetin** (0-500 mg) and garlic (0-500 mg).

**ACTIVITY** - Dietary vitamin supplement; cardiant; antidiabetic; hypotensive; antianemic; cytostatic; osteopathic; antilipemic; thrombolytic; anticoagulant.

A study in seven healthy volunteers compared changes in blood clotting times induced by the modular system (Modules 1 and 4) with the use of conventional multivitamins with acetylsalicylic acid (81 mg). In the two female non-smokers taking the conventional preparations, clotting time was increased from 5.5 to more than 15 minutes. In the three smokers and two non-smokers who took Modules 1 and 4, the clotting times changed from 4-7.5 minutes to 3- more than 15 minutes.

**MECHANISM OF ACTION** - Platelet deagglutinator; thrombus inhibitor; antioxidant.

Vitamin and antioxidant biochemical action. The combination of acetylsalicylic acid and an antioxidant prevents the oxidation of **low density lipoproteins** in the coronary artery walls.

**USE** - For the treatment of nutritional losses and deficiencies and to reduce the risk of coronary **heart disease** (claimed).

To treat or prevent micronutrient deficiency and reduce atherosclerotic-induced coronary **heart disease**, Syndrome X, diabetes, stress related disorders e.g. mucous colitis and hypertension, immunodeficiency, anemia, fatigue, osteoporosis, cancer, hyperlipidemia and thrombosis in humans. Separate formulations for men and women can be used.

**ADVANTAGE** - The appropriate formulation matched to specific physiological needs provides optimal results and avoids ingredients counteracting each other or impairing absorption of other ingredients. Platelet deagglutination and thrombus inhibition occur without prolonged blood clotting times and without the side effects of ulceration associated with a higher daily dose of acetylsalicylic acid.  
Dwg.0/0

L124 ANSWER 39 OF 39 WPIDS (C) 2002 THOMSON DERWENT  
ACCESSION NUMBER: 1971-67553S [42] WPIDS.  
TITLE: 3,3',4',5,7-penta-benzyl-quercetin.  
DERWENT CLASS: B02  
PATENT ASSIGNEE(S): (LBIO) LABS BIOSEDRA  
COUNTRY COUNT: 6  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
BE 765681	A		(197142)*		
JP 46007332	A		(197202)		
DE 2122514	A		(197205)		
FR 2088127	A		(197212)		
GB 1295606	A		(197245)		
DE 2122514	B	19740411	(197416)		

IT 1036042     B   19791030 (198006)

PRIORITY APPLN. INFO: FR 1970-18458     19700521

AB   BE     765681 A UPAB: 19930831

3,3',4',5,7-Penta-benzyl-quercetin Title cpd. useful as a capillary-protecting agent esp. in treating vascular disorders due to arterial hypertension, diabetic and **arteriosclerotic**, retinitis, chronic glomerulo nephritis hepatic insufficiency, varices of the legs and haemorrhoids are prepd. by benzylating **quercitin** with benzyl chloride in the presence of KI and K<sub>2</sub>CO<sub>3</sub>.

FILE 'HOME' ENTERED AT 10:45:27 ON 11 JUL 2002